HELSINKI SCHOOL OF ECONOMICS (HSE)
Department of Accounting and Finance

NORDIC ASSET MANAGERS TRADING IN THE EASTERN MARKETS: A CUSTODY PERSPECTIVE.

Case Handelsbanken

Finance
Master´s thesis
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Spring 2008

Approved by the Council of the Department 13 / 5 2008 and awarded the grade good, 60 p.
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ABSTRACT

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The aim of the study
This Thesis has two primary targets. *Firstly*, the study aims to provide the reader with an understanding of the securities custody industry: Furthermore, the special traits of custody service provision on the *Eastern markets* are covered. In-depth information regarding Nordic asset managers' perceptions of these markets is provided. Thus, *secondly*, having read the empirical section, the reader should be able to identify the primary motives and main barriers regarding Nordic asset managers' entry to the Eastern markets. Finally, the target group, Nordic asset managers, is divided into two sub groups in order to test for group –specific preferences.

References and research data
Articles and literature relating to securities custody, along with numerous finance studies, serve as principal sources of information for the study. The quantitative data of the empirical section is gathered by means of questionnaires sent to the target group. In addition, interviews are conducted with securities custody industry professionals.

Data analysis
The obtained responses to the questionnaire are divided into two separate groups depending on the size (i.e. assets under management) of the responding company. The responses of the two groups are compared using *the Pooled-variance t-test for the difference in two means:* A method that allows the researcher to make comparisons between the means in two samples. The general Zero Hypothesis in this study is that the arithmetic means of two sub groups' answers are identical. The counter-hypothesis is that they are not identical. Individual tests are conducted regarding each of the measured variables. A two-tail Student's t-test is applied. In addition to these quantitative measures, a descriptive analysis on the case results is performed, as well.

Results & Conclusions
The results obtained in the empirical section imply the following: Among both sub groups, investments into Eastern markets are estimated to grow. Primary motives for investing into these markets are *high expected ROI* along with *diversification benefits*. Primary sources of concern with regard to market entry are: *Instability in the political environment*, *lack of consistent regulatory environment* and *inefficient markets.* With some minor exceptions, the general results suggest that *no remarkable differences between sub groups' preferences are found.*

Key terms
Book-entry System, Central Securities Depository, Eastern Markets, Securities Clearing and Settlement, Securities Custody .

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1. INTRODUCTION

1.1 Motivation For The Study

In recent years, the global markets have become more integrated. This comes as a result of a broader trend of liberalizing and deregulating the capital markets, in *developed* as well as *in developing* economies, too. Following the collapse of the communist regimes in the early 1990's, a number of Central and Eastern European (CEE) economies started their transition to market economies (Syllignakis & Kouretas, 2006).

In the transition, also the financial markets in the CEE markets have undergone significant transformation (Berglund et al.,2006). The high overall rate of development within the Eastern Europe has also caught significant amount of attention from the west. The Eastern economies, Russia at the head, have been growing at an impressing pace over the past years. The Gross Domestic Product only within Russia has grown from USD 592 billion in 2004 to USD 1236 billion in 2007. In 2009, it is estimated to reach USD 1650 billion (Spiridovitsh S., 2007) Similarly, this same pattern is to be found at the other former Soviet countries now under study. Along with the general growth of the economies, the local securities markets and securities trading have started to tempt foreign investors into these new playing fields. Despite their relatively low liquidity and potential fragility, the importance of the new EU accession countries is increasing remarkably (Devyzis & Jankauskas, 2004). It is indubitable that the CEE stock markets are attracting a growing amount of interest: "They play a far more important role in the international financial environment" (Syllignakis & Kouretas, 2006). Moreover, Syllignakis & Kouretas add that *the contribution of these markets to internationally diversified asset portfolios has also increased.*

Even though the CEE markets demonstrate great potential for the investing public, the risks and dangers inherent are undeniable. As put in Global Custodian (2007), "In emerging markets, the only consistency when it comes to regulatory and tax requirements is inconsistency". The lack of regulatory environment, commonly accepted standards and systematic application of law can become a large problem. In order to tackle these problems, the CEE economies have tried to adapt their standards to the international ones (Syllignakis & Kouretas, 2006).

Standardization, order execution and ownership rights all pertain to the industry of *securities custody*. Securities custody, essentially, is a service consisting of holding and administering securities on behalf of other parties (Chan et al., 2007). Providing custody services in the developing Eastern markets is not a straightforward process. The custody environment is a lot different from that of developed countries', which poses several challenges to the service provider. Common problems faced in these markets pertain e.g. to *corporate events* and peculiarities regarding the process of *securities clearing and settlement.* Moreover, general market practices within Eastern markets may differ widely from each other and those adopted in the developed countries.

This Thesis is a case study commissioned by *Handelsbanken Nordic Custody Services.* The department sees a huge business potential in the *Eastern markets,* and has recently begun providing custody services also for securities traded in these markets. According to Mr. *Jarkko Järvitalo*, Head of Global Custody Products at Handelsbanken, it is crucial to be among the first Nordic service providers in the Eastern markets.

Due to the large earnings potential of the market place, Handelsbanken found it appropriate to commission a case study regarding Nordic Asset Managers' perceptions and motivations regarding trading in the Eastern Markets. As a securities custody service provider, particularly opinions regarding custody aspects are crucial. Therefore, this study has been carried out with a special custody focus to it.

1.2 Research Questions And Limitations Of The Study

This Thesis has two primary targets. *Firstly*, the study aims to provide the reader with an understanding of the securities custody industry: Furthermore, the special traits of custody service provision on the Eastern markets are covered. In-depth information regarding Nordic asset managers' perceptions of these markets is provided. Thus, *secondly*, having read the empirical section, the reader should be able to identify the primary motives and main barriers regarding Nordic asset managers' entry to the target market.

The study aims to answer e.g. the following questions:

- What in essence is securities custody, and which are the main problems regarding investing in the Eastern markets from a custody point of view?
- What does the investing environment, from a custody point of view, look like in these markets? What do the future outlooks imply?
- Which markets does the case group find most attractive? Which factors drive their interest? Which products is the case group interested in trading?
- In 2006 Syllignakis & Kouretas posited that *the contribution of these (CEE[1]) markets to internationally diversified asset portfolios has increased.* Does the sample group intend to invest into these markets in a growing manner? What do they think about the general development?
- According to Köke (1999), managers investing into CEE markets check a whole catalogue of criteria. Are the risk factors perceived by the case group consistent with the results obtained in Köke's study?

In the empirical part, the researcher has divided the institutional investors into two sub groups depending on the institutions' size. The results from the aggregate data, as well as from the sub groups, are compared. This part of the study is crucial: Possible differences between sub groups would imply the need (for Handelsbanken) to customize its service offering depending on the customer's size.

[1] Central and Eastern European Markets

In this study, numerous different variables are measured and tested. The general *zero hypothesis* in the study is that the arithmetic means of the two sub groups' answers are identical. The *counter-hypothesis* is that they are not identical.

Table 1. Zero- and counter Hypotheses of the study.

H^o:	$\mu^1 = \mu^2$ or $\mu^1 - \mu^2 = 0$
H^1:	$\mu^1 \neq \mu^2$ or $\mu^1 - \mu^2 \neq 0$

Individual tests are conducted regarding each of the measured variables. A two-tail Student's t-test is applied . If supported by statistically significant evidence, the zero hypothesis is rejected and replaced by the counter hypothesis.

1.3 Primary Concepts Used In The Study

Book-entry System is an accounting system permitting the electronic transfer of securities without the (physical) movement of certificates (European Custody Market Guide, 2007-8). It is a computerized, totally electronic system for the registration and holding of securities. The securities holders have book-entry accounts which are held *in book-entry registers* (Vehmas, 1993).

Central Securities Depository (CSD) is an institution for securities holding. A CSD enables securities transactions to be processed by means of book entries. Physical securities may be immobilized by the depository or securities may be dematerialized so that they exist only as electronic records (European Custody Market Guide, 2007-8).

Eastern Markets in this study comprise the following countries: Belarus, Bulgaria, Czech Republic, Croatia, Estonia, Kazakhstan, Latvia, Lithuania, Poland, Romania and Uzbekistan. A lot of prior research on the Russian market is already available : Thus the market was deliberately excluded from the study.

Securities Custody, essentially, is a service consisting of holding, and administering, securities on behalf of other parties. Along with the rapid growth and change of the financial markets, also the services offered by *custodians* (market parties offering custody services) have had to change by nature, as well. The original function of the industry, i.e. physical safekeeping of securities, has made way to a range of information and banking services (Chan et al., 2007).

Securities Clearing and Settlement is a process following a trade execution. In *securities-trading*, the counterparties generally agree on exchanging certain securities on a given day for a given amount of money. In settling, the obligations of the counterparties are discharged: The securities are transferred from the seller to the buyer, and the cash from the buyer to the seller (ECB, 2005).

1.4 Structure Of The Study

The rest of the study will be organized in the following way. In the next chapter, A general overview on the *Securities Custody industry* in general is provided. Having read the chapter, the reader will have a clear understanding of the Securities Custody essentials: What is the size of the market, what are the value drivers as well as the primary risks for *custodians*. Key differences between l*ocal* and *global custodians* are discussed. The concept *of Central Securities Depositories* will also be covered. This chapter will be followed by a look into *Securities Clearing and Settlement*: What actually happens in the back-office when a trade has been executed. Chapter 4 provides insight into the research methods as well as a brief presentation of the case organization and -department. In the fifth chapter the focus is set on studying the special traits of custody service provision on the Eastern markets - The sixth chapter will present each of the studied countries briefly. Results, along with the summary and conclusions, will follow in the seventh and eighth chapter, respectively. Suggestions for future research are also provided in the last chapter of the study.

2. THE SECURITIES CUSTODY INDUSTRY

Securities custody, essentially, is a service consisting of holding, and administering, securities on behalf of other parties. Along with the rapid growth and change of financial markets, also the services offered by *custodians* (market parties offering custody services) have had to change in nature. The original function of the industry, i.e. physical safekeeping of securities, has made way to a range of information and banking services (Chan et al., 2007).

The custody industry was developed as the custodians started providing basic custodial services to their local pension, insurance and retail funds (Thomas&Beacham, 1990). According to Chan et al. (2007), custody in its simplest form comprises holding and administering securities on behalf of third parties. These services are often denoted as *safekeeping* and *settlement*. Custody industry has its roots in physical safekeeping – custodians provided their clients with a safe place for securities and charge a commission fee for doing that. The actual place of storage would either be in their own premises or those of yet another safekeeping service provider. Banks, with their large and safe vaults, were a natural choice of service provider for many. Nowadays custodians, with their broad service offering, play a significant role in promoting efficiency and competition in the financial markets. As the securities have, to a large extent, been dematerialized and immobilized, the nature of the custody environment has changed radically. As Thomas&Beacham (1990) almost two decades ago discovered: "Dematerialization, book-entry systems and depositories will certainly not eradicate the global custody market, but they will undoubtedly change it away from securities processing towards information provision and processing".

2.1 From Local To Global Custody

Custodian firms are categorized into separate classes depending on the services they offer. Some custodians may choose to specialize exclusively in their home market. They serve as a primary custodian to their domestic clients, but may also perform a *sub-custodian* role to their foreign clients, too. These custodians are thus called *local-* or *sub-custodians*, depending on whether the client is domestic or foreign (Chan et al., 2007). Local custodians provide local market expertise and facilitate the communication between foreign banks and domestic *central securities depositories* (CSDs). It is largely due to local custodians' ability to perform these functions that the cross-border trading of securities has developed very rapidly (Schmiedel&Schönenberger, 2005).

Whereas local custodians are devoted to perform custodial functions only on their home market, there are also service providers who have extended their service offering to include several market places. These companies are known as *global custodians*. According to International Securities Services Association (ISSA, 2001), "A global custodian provides clients with multi-currency custody, settlement and reporting services which extend beyond the global custodian's and client's base region and currency and encompass all classes of financial instruments".

Schmiedel &Schönenberger (2005) also note that in order to be able to cover several markets, global custodians use a network of sub-custodians; each sub-custodian is a member of their local CSD and knows the local market practices. Global custody firms facilitate institutional investors' trading by offering a single gateway for settling all of their cross-border transactions; the picture below is an illustration by ISSA to demonstrate the different phases in a cross-border transaction.

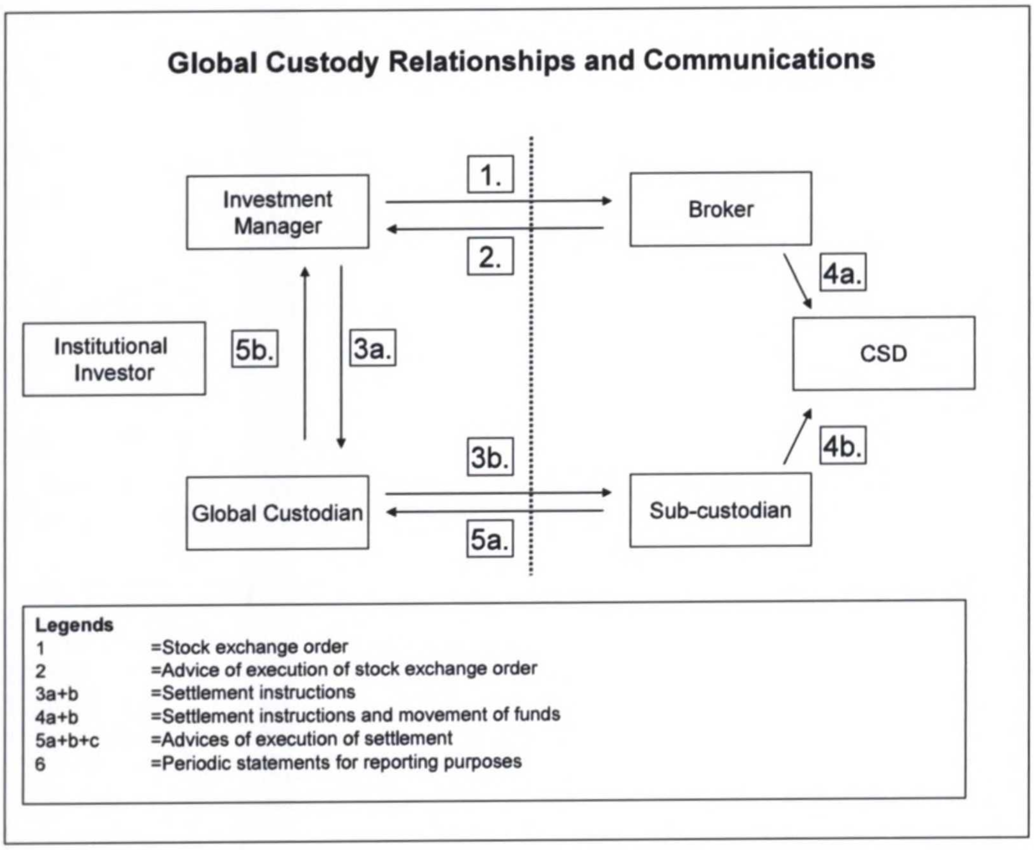

Figure 1. Global custody relationships and communications (ISSA 2001).

As *figure 1* clearly demonstrates, there are numerous back-office functions to be performed in cross-border trading. Thus the role of global custodians is remarkably important as they hold a range of assets on behalf of their customers. The most common assets held in custody include *equities, government bonds* and *corporate bonds.* In addition, other assets held in custody comprise *a large variety of debt instruments, mutual fund investments, warrants* and *derivatives* (Schmiedel &Schönenberger, 2005).

2.2 The Different Services Provided By Custodians

Along with plainly executing securities clearing and settlement, banks also offer numerous other ministrations to their custody clients. The custody services provided can be classified in several different ways, largely depending on how the *basic custodial services* are determined. A categorization introduced by Thomas&Beacham (1990) categorized *securities safekeeping & settlement, dividend handling and- collection, tax reclamation* and *related reporting* as basic custodial services. It is necessary to note in this context that dividend collection and tax reclamation belong to the broader class of so-called *asset services*. Other asset services include *corporate actions, corporate reorganizations* and *proxy voting* at shareholders' meetings (Chan et al., 2007).

As opposed to the basic services mentioned above, custodians may engage in *added-value service provision.* For example *securities lending* and *performance measurement* would serve as good examples of core value-adding services (Thomas&Beacham, 1990). Added-value services exclusively provided by global custodians are *maintenance of multi-currency securities and funds accounts, settlement of trades in domestic and foreign markets* and *briefings on specific countries, especially on emerging markets.* Global custodians also have a large role in assisting their clients with their tax claims

(ISSA, 2001). *Figure 2* below helps to clarify the value chain of securities services. It helpfully demonstrates the roles different market parties supply and purchase. As illustrated, local and global custodians both enter the scene only after a trade has been completed. The preceding functions are performed by other market participants such as investment banks and brokers.

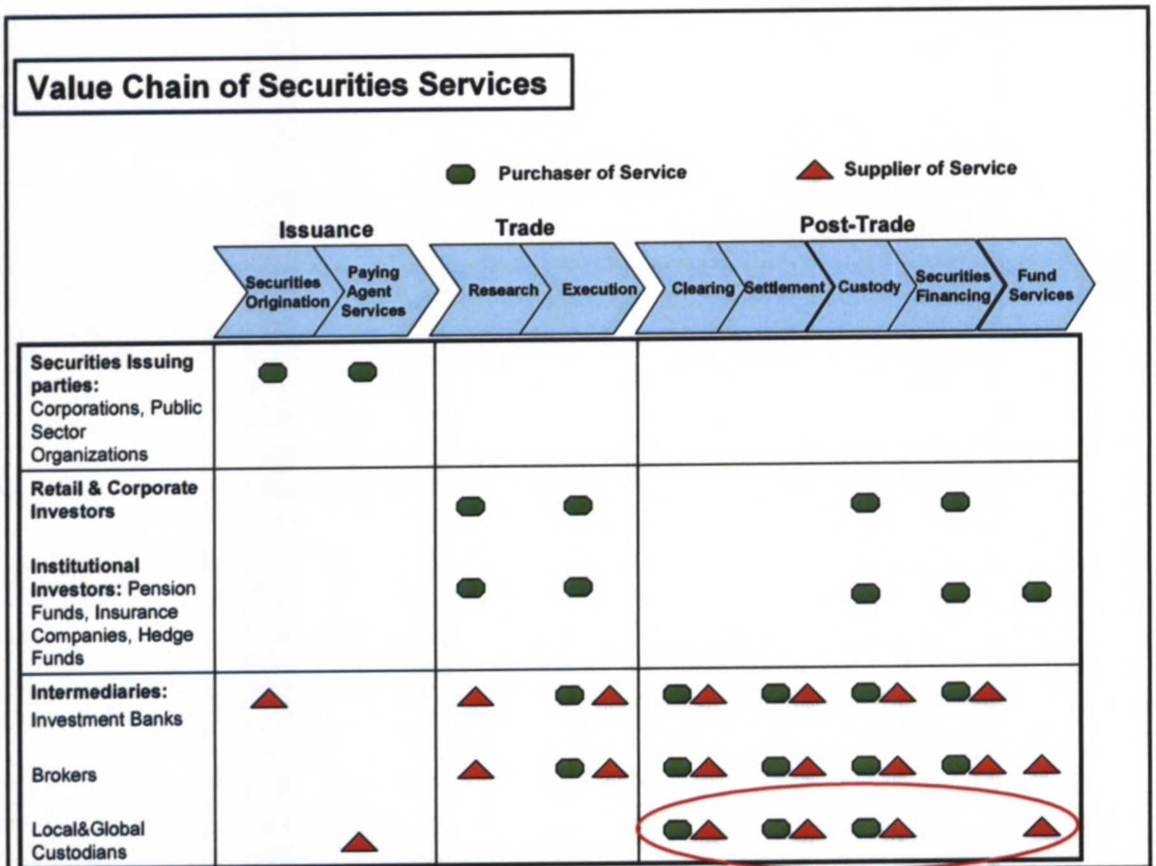

Figure 2. Value chain of securities services, Chan et al., 2007. Note: An intermediary may purchase and supply multiple services in the value chain, sometimes via different subsidiaries. A supplier may purchase services from a higher-tier intermediary.

As pointed above, the modern custody services industry is to a large extent information-dominated. Much of the work done by custodians involves acting as an information intermediary, providing the securities holders with sufficient information from the issuing party. Worth a notion is the fact, that all these services could've been performed by the client itself. However, according to Chan et al. (2007) it's more convenient to entrust a specialist who has developed economies of scale in the business. The custodian is able provide the needed services for a lesser price and amount of time. With their specialist knowledge of each market place, custodians make less operational errors and thus lower their client's risk exposure.

2.3 Securities Lending – A Growing Business

Securities lending has become one of the hot topics in the industry. As the prestigious *G30* has recommended the use of securities lending and borrowing (in order to add to market stability), many custodians nowadays provide that service to their clients. By borrowing the securities in which the investor is short, rather than doing nothing, the investor avoids the possible sanctions due to failure to deliver (Vehmas, 1993). According to Thomas&Beacham (1990), stock borrowing and lending is vital in helping to maintain market liquidity. However, the borrowed stocks don't come without a cost to them. According to Thomas, stock lending has become a source of extra revenue not only to the custodian working as a middleman, but also to the lending institution. He points out that the revenue created from stock lending may even set off the custody fees payable.

Handelsbanken securities lending specialist Mr. Olli Pohjonen agrees with the relevant studies by Vehmas (1993) and Thomas&Bleacham (1990): "Securities lending essentially helps to improve the market liquidity here on the Nordic market". As the Markets in Financial Instruments Directive (MiFID) was introduced in November 2007, also securities lending business was affected. "The new codes on securities lending and collection of stamp tax were a great thing for us custodians. The back-office operations are now more straight-forward than before. This has helped us in reducing our cost-burden but also in attaining more business from our clients. From a client's point of view, allowing Handelsbanken to lend the securities can even offset the annual administration and transaction costs". The trend in securities lending has been clearly upward. According to Mr. Pohjonen this is not only due to new legislation; "The business is growing at a dazzling pace. Even though if the legislation had been unchanged, we still would've been experiencing significant growth. And we sure don't complain, adds Pohjonen".

2.4 Custody Market Size

There are no explicit figures on the custody market size, but rough estimates can be obtained by three different ways. Firstly, the value of securities held by custodians can serve as a proxy for market size; secondly, one can measure the total fee revenues custodians receive from safekeeping and settlement of securities. Finally, the total fee revenues received from the full range of services provided by custodians can be measured (Chan et al. 2007).

According to Chan et al. (2007), the most straightforward measure in determining the custody market size is to scrutinize the value of securities issued altogether (i.e. all the securities ever issued). However, this measure does not take account the portion of securities directly held by end-investors (such as professional firms) who are not required to use custody services. Therefore the actual value of assets under custody is less than aggregate amount of security issues.

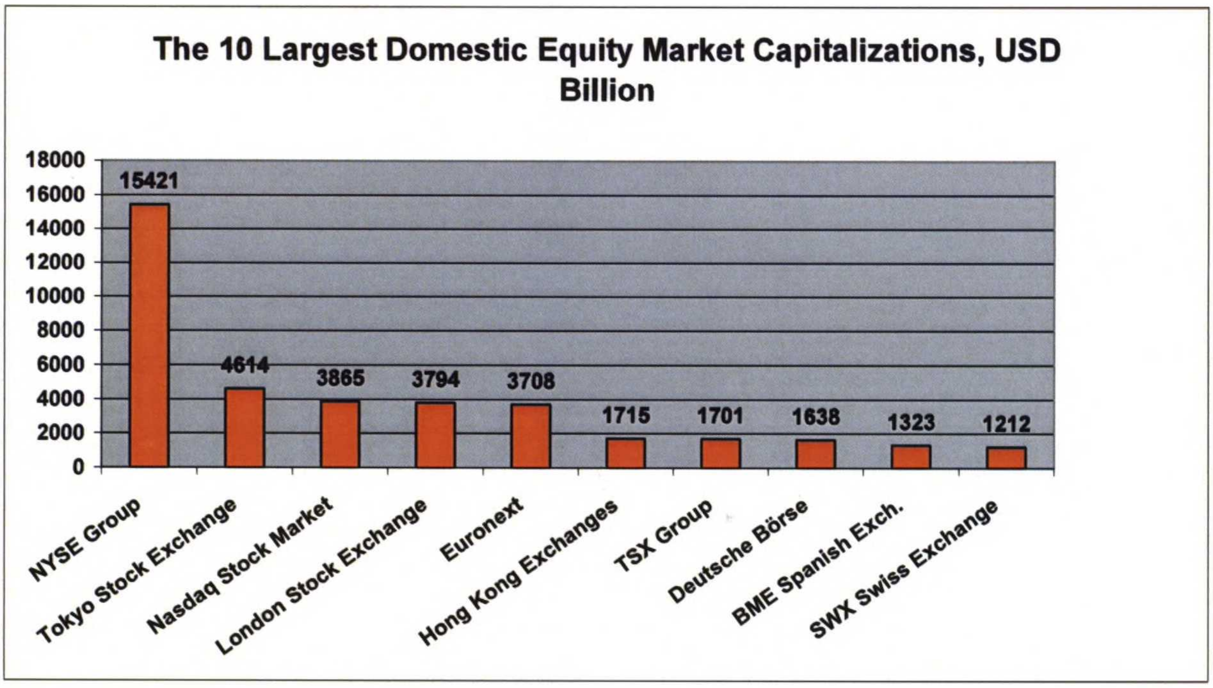

Figure 3. The 10 Largest domestic equity market capitalizations, $bn. Sources: World Federation of Exchanges, Annual Report 2006; BIS Quarterly Review, March 2007.

The aforementioned deficiency considered, the value of all new security issues (equity, bonds, money market instruments) serves as a well-functioning proxy into the custody market size. In 2006, the total value of securities issued amounted to over $128 000 billion. Equities accounted for just $ 50 600 billion, whereas domestic and international fixed income securities stood for more than $67 000 billion (52% of the total amount). Money market instruments' share was slightly over 8% of total; $10 600 altogether.

Today the securities industry finds itself in the midst of profound change. Especially developments in information and communication technology are creating pressure for further consolidation. Economies of scale and scope accelerate the need for efficient and integrated infrastructure. Stock exchanges, trading platforms, clearing and settlement facilities are all regarded (Schmiedel&Schönenberger, 2005). According to Aaltio (2004), a good example of this integration is the merger between the French CSD *Sicovam* and an international CSD *Euroclear* in 2001. Later on during the same year, the Dutch CSD *Necigef* and *CIK* from Belgium merged into Euroclear, too.

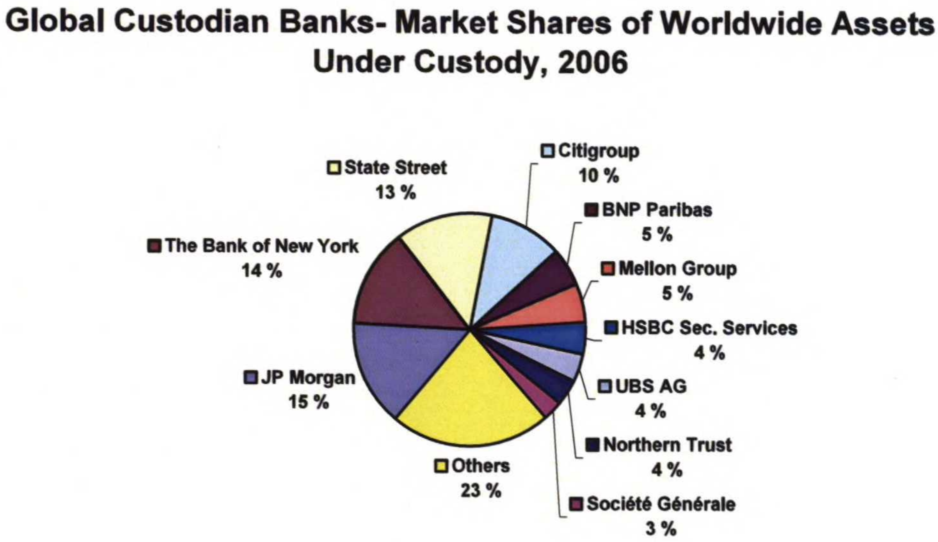

Figure 4. Total assets under custody with the major global custodians. An extract from source: www.globalcustody.net. Assets as at February 19 2007.

According to Chan et al. (2007), the custodians with the largest amounts of assets under custody are *JPMorgan, The Bank of New York* and *State Street (globalcustody.net, 2007).* As covered in the previous paragraph, consolidation in the industry is proceeding with an accelerating speed: On 4th December 2006, The Bank of New York and Mellon Group (6th largest global custodian) publicized their agreement to merge. Further, on 5th February 2007, State Street announced it was acquiring Investor Financial Services Corporation, owner of Investors Bank&Trust (13th largest global custodian).

2.5 Central Securities Depositories

The movement of substantial amounts of physical securities would often result in delays and errors in securities settlement. Delayed settlement would further give birth to severe liquidity problems in the financial markets. In addition, using physical securities certificates increased the probability of fraud and forgery. Given the need to immobilize the securities certificates, central securities depositories (CDSs) were set up (Chan et al., 2007). Nowadays it's internationally recommended for each country to have its own CSD permitting clearing and settlement of securities based on a book-entry system (Vehmas, 1993)

Dematerialization and immobilization of securities greatly affect the market practices. Where adopted, they significantly benefit the market functioning and liquidity. The term *Immobilisation of securities* refers to the *storage of physical securities at a central securities depository*. As all the securities are kept in the same storage, the need for movement is eliminated. However, there is a prerequisite of *fungibility*: In order for the collective safe to work properly, the securities of each issue must be interchangeable with each other (Iivonen, 1993).

Along with securities *immobilization*, an idea of electronic safekeeping of securities emerged. *The book-entry system* and *dematerialized securities* were born. In a book-entry system the material securities have been eliminated and transformed into electronic ones. It is a computerized, totally electronic system for the registration and holding of securities. The securities holders have book-entry accounts which are held *in book-entry registers* (Vehmas, 1993).

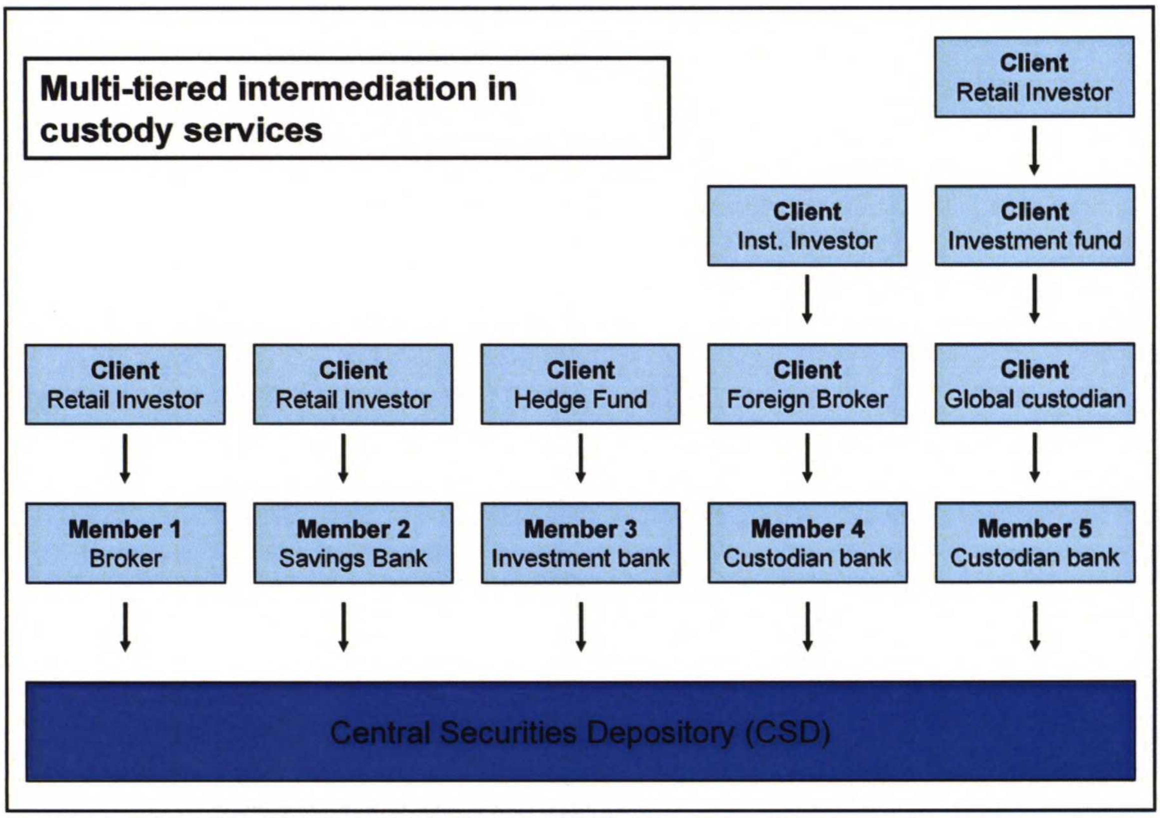

Figure 5. Multi-tiered intermediation in custody services. Trustee companies are firms that are given a member status with the national CSD; custody clients themselves are not members of the CSD, but must use a trustee (member) as an intermediary to register their holdings at CSD book entry registrars. Note: For illustrative purposes only. Not all intermediaries and end investors are shown. Source: Chan et al., 2007.

Before the book-entry system was introduced, securities had to be physically packed and moved (if not immobilized). In addition, the authenticity of the securities had to be checked every time being moved from one place to another (Iivonen, 1993). Therefore, *dematerialization*, i.e. transforming the physical securities into electronic form, provides significant cost reductions and safety improvements to the custody industry. However, there are still markets in which securities are kept in physical form, especially in the emerging markets.

2.6 Common Features Of CSDs

Central Securities Depositories were created to immobilize the securities certificates, and thus to facilitate the settlement procedure. According to Chan et al. (2007), the structure and range of services provided by CSDs have become highly diverse. However, they still do share some common core features. Central securities depositories are, in general, accorded their status in the national regulations. Even though it wasn't stipulated in law, the CSDs often become *de facto* monopolies in their home market. Every CSD's primary function is to ensure the smooth functioning of the securities market in a technical way. Registration of securities ownership, as well as ensuring the existence of these securities, are the core services provided. "The development of sound and efficient market processes is of common interest to financial authorities" (ECB, 2006). Thus, the CSDs being cornerstones of an efficient settlement system, they are held under rigorous monitoring and scrutiny, CSDs are supervised both by national central banks as well as securities market authorities. The main objective is to prevent possible materialization of *systemic risk* (Chan et al., 2007).

2.7 Risks Incurred In Custody

The risks involved in custody services come in many forms. These risks can be divided into three broad categories: *operational-, credit-* and *legal risks*. The types of risk incurred largely vary by the nature of the service providers. This is due to the fact that requirements on regulation and compliance are not indifferent for all custodians.

According to ISSA (2001) other risks in custody include *business risk, counterparty risk, country risk, liquidity risk, market risk, settlement risk, systemic risk and transfer risk.* These risks will also be covered in short in this chapter.

2.7.1 Operational Risks And Credit Risks

An operational risk is defined as the risk of a financial loss resulting from inadequate or failed internal processes, people or systems, or from external events. In addition, the definition includes the risk of failure to comply with applicable regulations, contractual agreements or firm's own policies. ISSA (2001) determines operational risk as "risk of loss due to clerical errors, organizational deficiency, delays, fraud, system failure, misperformance, non-performance of third party service providers and similar incidents". Operational risks are extremely inherent in *corporate actions*, *settlement* and *fund accounting and administration.*

A *corporate action* refers to any event initiated by the issuer of a security, giving rise to a right in favor of the investor. The largest amount of operational risk in the field of custody services belies in this category. According to Chan et al. (2007), in the worst case, the entire value of an action could be at stake due to "operational errors or a lack of follow-up and tracking" by a custodian. Incorrect interpretation or communication of the terms of a corporate action could be costly, too. Summa summarum, tracking, interpreting and communicating corporate actions is the main source of operational risk for a custodian company.

Operational risks are best mitigated with an appropriate and effective system of stringent controls. This requires the custodians identifying the operational risks involved and putting adequate controls in place. In addition, continuous evaluation, testing and monitoring of the risks is needed (Chan et al, 2007).

A custodian faces a *credit risk* when it is not sure whether a client is able to meet its obligation to it or not. Since the settlement process involves purchasing, selling and holding securities for the client, custodian banks not only process payments but are also extending credit and liquidity to their clients. On one hand, a custodian bank may decide to lend money to its client for securities purchases. On the other, it may be willing to advance money to clients of interest payments or dividend payments when the money has yet not been received from the securities issuer. In short, "credit risk is the risk that a counterparty will fail to deliver or pay in full on due date (or with accrued interest if delayed) or be liquidated or go bankrupt (ISSA 2007). It includes *replacement cost risk*, *principal risk* and *cash deposit risk* (European Custody Market Guide, 2007-8).

Credit risk is mitigated via credit quality processes which control the credit quality of clients with whom custody arrangements are entered into. For each client, the business activities are identified. Then, credit limits are set accordingly. As the limit is approaching, escalation procedures enter the play to ensure adequate risk management review and action (Chan et al. 2007).

2.7.2 Legal Risks

Legal risk is generally defined as the risk of a loss of a right due to laws and regulations being inapplicable or unenforceable. Inherent in this risk category is the risk arising from contestability of rights over collateral. Legal risk also includes inapplicability of the preferred choice of laws in a cross-border context. An example to illustrate this: A custodian would like to liquidate a collateral used to secure a loan, but national jurisdictions are contradictory (Chan et al. 2007). A lot of time and other resources are often needed to solve problems of aforementioned character. Additionally, one trait of legal risk is it's unexpected character. As noted in European Custody Market Guide (2007-8): Legal risk is the risk of loss due to *unexpected application* of law or regulation.

Legal risk is, however, best managed via rigorous credit risk management and monitoring. A correct application of these measures eliminates the exposure to financially unsound clients in the first hand. On the public policy level, creating clear and binding rules to situations of conflicting laws can help to mitigate the legal risk. Common legislation, as it makes contracts of enforceable and reliable, is also pertinent in this task. EU has several initiated proposals to harmonize rules in the clearing and settlement system. The most recent ones of those are the aforementioned *Collateral Directive*, the *Settlement Finality Directive* and the *Winding-up of Credit Institutions Directive*. In spite of some diverging interpretations, legal certainty in the area has been improved. However, outside the EU-area the problem still remains relevant. Improving the international understanding of legal risks is among the areas International Securities Services Association is addressing (ISSA, 2001).

2.7.3 Additional Custody Risks

As presented earlier, other relevant risks in custody are *business risk, counterparty risk, country risk, liquidity risk, market risk, settlement risk, systemic risk and transfer risk.* The list could extend to categorize even more risks, but here the line has been drawn to cover only these most common categories. The risk definitions are extracted from **ISSA 2001 report on global custody risks.**

Just as in any other line of business, *business risk* is strongly present also in the custody industry. In it's simplest form it is used to describe the loss of business from a client. This can be due to pressure on margins, innovation or new laws.

Counterparty risk (also known as *settlement risk*) occurs when a trade contract is not fulfilled, either due to inability or unwillingness. Counterparty risk is much alike to *liquidity risk*, which denotes a situation where the counterparty does not meet its obligations on time, *but on some unspecified time thereafter*.

Country risk comprises many different aspects. Usually it is classified into several areas such as *economic, fiscal* and *legal risks* (which we already discussed earlier in this chapter).

Market risk, in this context, relates to eventual market price fluctuations of securities and currencies between the time of trade execution and trade settlement. *Transfer risk* is faced when a country introduces exchange controls on its currency or limits the transfer of company's proceeds abroad.

One of the things most feared in banking is *systemic risk.* However, systemic risk isn't appointed a single and uniform definition. Bartholomew and Whalen (1995) defined systemic risk as "an event having effects on the entire banking, financial or economic system, rather than just one or few institutions". Systemic risk in banking is higher as the correlations of bank failures increase. Systemic risk can either be domestic or transnational (Kaufman&Scott, 2003).

A systemic breakdown results in significant liquidity and credit problems that further threaten the stability and confidence in markets. According to Chan & al. (2007) systemic risk is often referred to with terms as financial contagion, knock-on or domino effect.

3. SECURITIES CLEARING AND SETTLEMENT

Trades executed in the financial markets are followed by a process called *securities clearing and settlement*. In *securities-trading*, the counterparties generally agree on exchanging certain securities on a given day for a given amount of money. In settling, the obligations of the counterparties are discharged: The securities are transferred from the seller to the buyer, and the cash from the buyer to the seller (ECB, 2005).

In order to ensure that the process is conducted in a safe and efficient manner, specific infrastructures for this purpose are set in place. Investors hold their assets with custodians, which, in turn, have opened accounts at local CSDs. The final delivery of the traded securities occurs in the CSD's books. However, when the buyer and the seller use a same custodian, the settlement process is coined with a term *internalization of settlement*. In such a process the trade is only settled by the custodian in its books (the CSD is thus not involved) (ECB, 2005).

The securities markets' role as an intermediary in channeling funds between deficit- and surplus units has grown. Therefore also the smooth functioning of securities settlement systems (SSSs) has gained in importance. It is recognized that weaknesses in SSSs can further result in systemic disturbance not only for securities markets, but also for other payment and settlement systems (Russo et al., 2007).

Alone in 2003, the central securities depositories within the EU-area settled only euro-denominated securities worth more than €300 trillion. As a point of reference, this amounts to more than 30 times the GDP of EU. Therefore, it is of primary importance for central banks and securities regulators that the securities clearing and settlement infrastructure functions smoothly (ECB, 2005). The international standard-setting body for the industry is the Committee on Payment and Settlement systems (CPSS). It's a committee formed of Group of Ten countries, and often cooperates with the Technical committee of the International Organization of Securities Commissions (IOSCO) (Russo et al., 2007).

3.1 Securities Clearing And Settlement Service Providers

Within the European Union, there are three different kinds of institutions providing securities settlement services. These institutions are: Domestic CSDs, International CSDs (ICSDs) and custodians. The CSDs generally provide services to local players, whereas the ICSDs and custodians tend to have a more international clientele; they serve a multiplicity of markets and currencies (ECB, 2005).

Whereas the securities issuances are centralized to only CSDs and ICSDs, there are areas where the functions performed by custodians overlap those of ICSDs. For example, *securities lending and borrowing* is performed both by custodians and ICSDs. Therefore, according to Chan et al., (2007) the custodians tend to advocate the separation of banking and infrastructure services.

According to the ECB (2005), the level- and type of risk assumed in clearing & settlement varies by the institution at hand: Not all custodians perform the same functions. To facilitate the settlement process, *custodian banks* often engage in providing cash credit (and, as noted above, securities lending) to their clients. On the contrary, with only one exception, CSDs don't extend credit to their customers. Therefore they also avoid exposing themselves to credit risk.

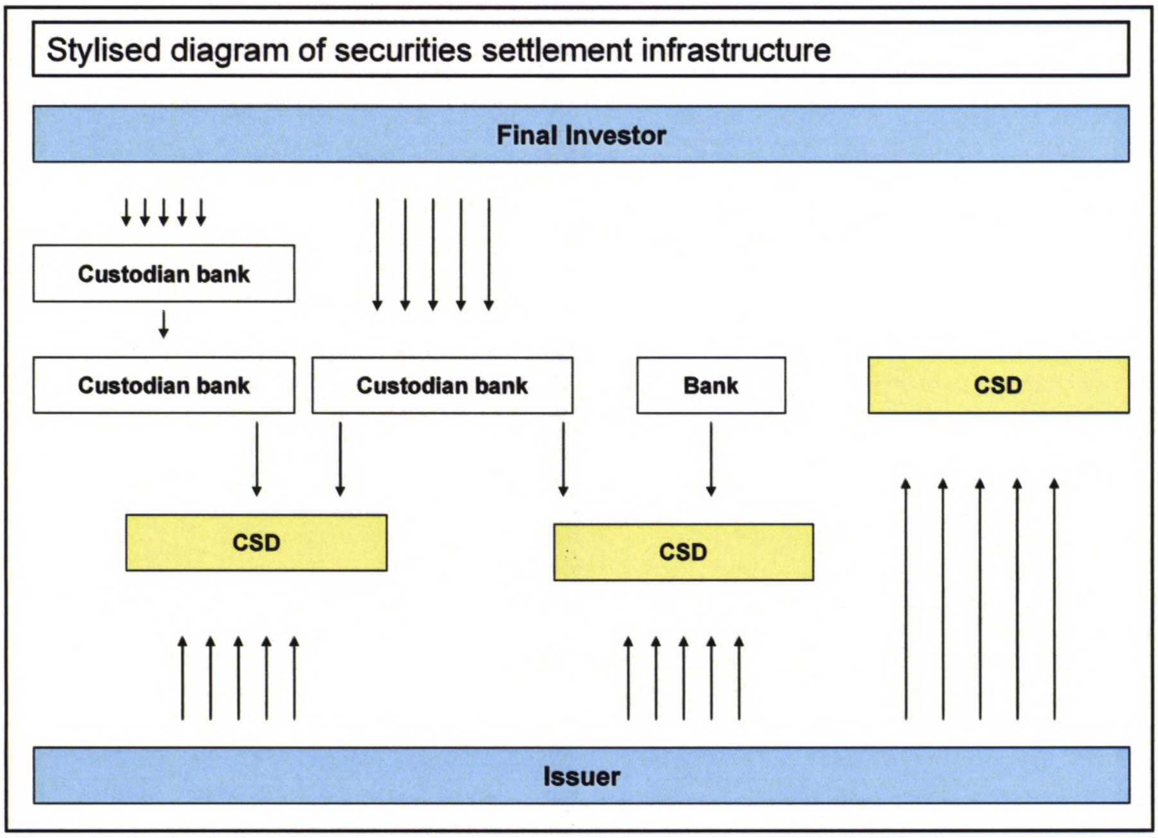

Figure 6. Stylised diagram of securities settlement infrastructure (ECB, 2005). Note: A downward arrow means *holding an account with* while an upward arrow indicates *placing an issue in.*

While a clear distinction is made between the activities undertaken by custodians and CSDs, ICSDs are something of a hybrid in between them. ECB (2005) notes that ICSDs have some features of CSDs, (i.e. the issuance of securities) to them, but also features of custodian banks (such as the provision of banking services). The two international central securities depositories are *Clearstream Luxembourg* and the Brussels-based *Euroclear Bank* (Russo et al., 2007).

3.2 Phases Of The Clearing And Settlement Process

After a securities trade has been executed, clearing and settlement of the transaction will take place. The term *clearing and settlement* denotes a process of determining the terms and obligations of the trading counterparties. According to Vehmas (1993), the organization of the process depends on the size and the nature of the market. The process of securities clearing and settlement is usually divided into four separate stages: *Confirmation, affirmation, clearing* and *settlement.*

The first stage, *confirmation*, refers to the process of checking counterparties' notifications of the details of the trade. For example security type, amount and price are checked. If they match, the trade is confirmed. When the trade is confirmed, the clearing corporation must make sure that the conditions for delivery exist. If all the conditions are met, the trade counterparties will be notified that the trade has been *affirmed* for clearing (Vehmas, 1993).

Trading counterparties' obligations in a trade are determined and recorded in the *clearing phase*. In this stage it is precisely determined what is to be delivered and received by the counterparties on the settlement date. Clearing makes possible the efficient and punctual transfer of funds, thus creating the base for settlement (Rissanen, 2001). Finally, the term *settlement* refers to the fulfillment of the obligations determined in the clearing stage. When the trade is settled, the seller delivers the sold security and the buyer delivers the purchase price agreed upon. According to Rissanen, settlement is the most important phase in the whole securities transaction; if settlement fails, the trade will fail, too. It is therefore crucial that the process of clearing and settlement is executed with utmost care, from trade confirmation to trade settlement.

3.3 Recommendations On Clearing And Settlement

For a long period of time, securities clearing and settlement was not seen as a vital part in securities trading. However, the delivery problems in the 1980's and the New York stock market crash in 1987 made the people realize the great importance of this function. As a response to the problems faced, many international corporations published their recommendations on how clearing and settlement should be carried out. They wanted to make the process safer, more efficient and more uniform (Rissanen, 2001).

According to the ISMA (International Securities Market Association), there are three reasons as to why efficient and precise trade clearing is important. Firstly, increased efficiency will, in a growing manner, help the organizations in their quest for ever lower costs. Secondly, trustworthy trade clearing is in a primary position in lowering the systemic risk. It is largely due to *remote brokerage* that the number of possible counterparties and trading volumes have risen significantly; along with these the risk level has also increased. Thirdly, the function of clearing and settlement is to see through the smooth functioning of the market. Therefore it should not be limiting the change taking place on the markets, but on the contrary, support it. In addition, with today's modern trading facilities, efficient clearing process will function as a source for a competitive advantage (Rissanen, 2001).

The possible reasons to malfunctions in clearing and settlement are numerous. According to Vehmas (1993), the rapid growth in international securities business has given birth to several problems. Differences in national trading, clearing and settlement are evident, and the application of international standards very slow (Paunonen et al., 2002). In order to facilitate trading and to create common market practices, many international organizations have issued their own recommendations to make path for safer and more efficient securities clearing and settlement. These recommendations, however, are not binding, as they only are different organizations' views on best practices. In securities clearing and settlement, the minimization of operational risk is of great importance. "Sources of operational risk arising in the clearing and settlement process should be identified and minimized through the development of appropriate systems, controls and procedures. Systems should be reliable and secure, and have adequate, scalable capacity. Contingency plans and backup facilities should be established to allow for timely recovery of operations and completion of the settlement process" (ESCB-CESR 2004).

The most prestigious of the issuing parties is the Group of Thirty (G30), comprised of thirty private financial institutions operating in the international financial markets. In addition to publishing recommendations, the party also issues status reports. In the status reports of different countries it scrutinizes the level to which the recommendations have been lived up to. Other significant institutions issuing recommendations are the International Organization of Securities Commissions (IOSCO), the Federation Internationale des Bourses de Valeurs (FIBV) , and the International Securities Services Association (ISSA) (Vehmas, 1993). The Group of Thirty has issued 12 recommendations regarding clearing and settlement practices in securities markets. These recommendations regard *securities immobilization and dematerialization* as also *central securities depositories. ISO standards / SWIFT messages* are also concerned. The full list of these recommendations is provided in Appendix 2.

3.4 Transactions Types In Clearing And Settlement

The two methods of settling a security transaction are called *delivery versus payment* (DVP) and delivery *free of payment* (FOP). Delivery versus payment, i.e. simultaneous settlement of the payment- and asset legs, is used in most countries. It is one of G30's recommendations (Please see Appendix 2) that DVP should be employed as the method of settling all securities transactions. Most settlement systems even require Delivery versus payment –based trading in order to lower the risk burden (Leinonen, 2005).

Closely connected to *delivery versus payment* is the principle of *same day funds* (SDF). According to this principle, the recipient of a payment must have the funds available on the delivery date. Also this recommendation aims at enhancing and smoothening the efficiency of clearing and settlement process (Jauri, 1993).

The *Delivery versus payment* (DVP) –method of settling transactions is a mechanism widely recommended by different market committees and organizations. This method ensures that the delivery of the securities takes place *only* if the payment is done in time, and vice versa (ECB, 2005). Therefore, where the DVP-method is employed, the cash and the securities must both switch owners on the settlement date. In order to work most efficiently, a DVP –mechanism requires a link between a securities settlement- and payment system. This system can be either manual or automatic (Parkinson, 1993/16). Worth a notion is also the distinction between settlement on the market level and customer level. As Stehm (1996) denotes, it may very well be the case that the original trading party has used a broker to execute the trade. In this case the broker's client won't see the trade settled until the securities/funds are at its own account (and not broker's).

The other method of securities settlement, *free of payment*, is used e.g. in Russia. Using free of payment –method to clear and settle a transaction means that the delivery of the securities and cash is not simultaneous. To give an example: In Russia, the USD-denominated equities are usually delivered in three days, whereas the cash is distributed in only two days. Before the actual deliveries can take place, two stages must first be completed. Firstly, a so-called purchase-sale –agreement must be signed. Secondly, the trade counterparties must send *deliver- and receive free of payment instructions* to their respective custodians. Only when these aforementioned conditions are met will the trade settle (Unicredit Market Profile Russia, 2007).

3.5 Settlement Accounting

As presented in the earlier sections, the term *settlement* denotes the exchange of securities against funds after a transaction of securities has been made. Settlement involves two alternative methods of accounting and recording for the transaction. In *conditional contractual settlement*, an exchange of security and cash is effected by passing accounting entries across customer accounts on the settlement date (Thomas, 1990). This exchange is realized irrespective of whether the settlement is executed on that date. In other terms, conditional contractual settlement accounting signifies a system where the custodian reports to its customer representative of what was contracted to happen.

Actual settlement, in contrast, involves passing accounting entries only when settlement de facto has been effected. According to Thomas, *actual settlement date accounting* refers to any system whereby custodian's reporting to its customer is based on what has actually happened.

Investment managers, in general, tend to prefer to contractual settlement accounting method. It facilitates cash management and enables creating projections of stock positions for customers with certainty. This method is also used as a tool of transferring risk; against a corresponding fee, custodian assumes risk of the transaction not settling in the markets. In contrast, employing actual settlement accounting method is a very risky business for investment managers. Not only is then the management of short-term cash positions an insurmountable task; consequently, forecasting of the foreign exchange exposures is also inaccurate. This risk exposure is especially inherent in the developing markets (Thomas, 1990).

3.6 Risks in clearing and settlement

A large amount of risks is inherent in the process of clearing and settlement. This is exactly what has initiated such institutions as G30 to issue recommendations; to make trading safer and more efficient. In addition to unified standards and procedures, basic tools used to reduce clearing risks include the use of automated systems and netting of transactions (Stehm, 1996). Please see the section 2.7: *Risks incurred in custody* for a comprehensive description of the risk environment.

4. CASE COMPANY, DATA AND METHODS

In this chapter, a brief introduction of the commissioner of this case study, *Handelsbanken Nordic custody services* –department, is provided. In addition, information regarding the data and methodology used in the empirical section of this thesis are provided.

4.1 Case Company: Handelsbanken Nordic Custody Services

The author has been employed by the case organization since November 2007, and has therefore been able to critically observe the daily operations in the Custody industry. Thus, having already had the privilege to gain practical knowledge in this area, the researcher found it reasonable to conduct a study regarding this same industry.

The Nordic custody services -department sees a huge business potential in the *Eastern markets,* and has recently begun providing custody services also for securities traded in these markets. According to Mr. *Jarkko Järvitalo*, Head of Global Custody Products at Handelsbanken, it is of primary importance to be among the first Nordic service providers in the Eastern markets.

Due to the large earnings potential of the market place, Handelsbanken found it appropriate to commission a case study regarding Nordic Asset Managers' perceptions and motivations regarding trading in the Eastern Markets. As a securities custody service provider, particularly opinions regarding custody aspects are crucial. Therefore, this study has been carried out with a special custody focus to it.

4.1.1 About The Case Organization

Handelsbanken is a Nordic bank with international operations. The bank is active altogether in 20 countries all around the world, employing more than 10 000 persons. Handelsbanken is widely known for its strong enterprise culture and customer-oriented, flexible service. The bank is based in Stockholm in 1871; here in Finland Handelsbanken has been present since 1985. In 2007 the number of persons employed by the company amounted to 570 (Handelsbanken Nordic Custody Services brochure, 2008).

Handelsbanken Nordic Custody Services –department provides its customers with securities services not only in Finland, but also in Denmark, Norway and Sweden. In Finland the Custody Services -department serves domestic and foreign clients on a number of market places; in 2007, the aggregate number of different market places covered amounted to 85.

The core custodial services provided by the department are securities *safekeeping and settlement*. In the Nordic countries the bank has its own safekeeping network; outside the Nordic region, a carefully screened and monitored group of sub-custodian banks is employed.

At Handelsbanken, each client has a named contact person: Firm-specific account managers make sure that the client's voice is always heard. This account manager is client's gateway to all services needed: All clients have different needs, and the final service portfolio is always individually tailored to fit the customer-specific needs and wishes.

Handelsbanken has but recently designed an internet-based service, *Nordic-I*, to meet the needs of their clients throughout the region. Nordic-I allows bank's clients to monitor their accounts real-time via an internet connection (handelsbanken web-page, 2008). This service brings the portfolio information readily available to clients and simplifies the day-to-day business via only one portal to the four Nordic countries.

4.2Case Data

In order to gather empirical data on the subject studied, a *questionnaire* was created (please see Appendix 4). This questionnaire was sent, per e-mail and regular mail, to an estimated number of 250 asset managers across the Nordic countries. The vast majority of the respondents were Finnish. Not only quantitative, but qualitative data was also gathered. Qualitative data was assembled in form of *interviews* conducted with industry professionals.

The contact information of the target group was mainly retrieved from Handeslbanken's own firm-specific database. The researcher was given access to the contact details of the company's Finnish institutional clients; this was a pre-requisite considering conducting a successful research on this subject studied.

The majority of the respondents are clients of Handelsbanken's Nordic Custody Services –department in Finland. A fraction of the responses were received from Handelsbanken's clients in Denmark and Norway. In addition, to grow the sample size even further, responses from a few Finnish non-client institutions were included in the study.

Out of the 250 queries sent to the Nordic asset managers, 33 were responded. This is also the sample size used in the statistical experiments conducted. Had the sample been even larger, would the *significance levels* applied to the studies have been higher accordingly. However, the prevalent circumstances taken into account, the researcher is very satisfied with regard to the number of responses finally received.

The share of the clients excluded from the study may have had an influence on the results of this study. In addition, in those cases when the interviewer was present, the interviewees' behavior may have been affected: It is possible that the interviewees unconsciously answer in the way that they think pleases the interviewer the most (Valkama, 2007). It is thus recognized by the author that a larger sample might've given different results. It would've also provided the Case company with even better and more *generalizable* results regarding the Eastern markets and the optimal service offering within them.

According to Lukka and Kasanen (1993; 1995), researchers using the case method as a research tool commonly argue that the results of their studies are not generalizable (or at least with great caution). Therefore the results obtained in this study should be scrutinized with a certain level of prudence.

4.3 Case Method

The obtained responses to the questionnaire were divided into two separate groups depending on the size (i.e. assets under management) of the responding company. After this the responses of the two groups were compared using *the Pooled-variance t-test for the difference in two means:* A method that allows the researcher to make comparisons between the means in two samples. Quoting Levine et al. (2003), the researcher chose to use this method because:

"In most cases the variances and standard deviations of the two populations are not known. The only information usually available are the sample means, the sample variances and the sample standard deviations. If the assumptions are made that the samples are randomly and independently drawn from populations that are normally distributed and that the population variances are equal, a pooled-variance t-test can be used to determine whether there is a significant difference between the means of two populations."

The general Zero Hypothesis in this study is that the arithmetic means of two sub group's answers are identical. On the contrary, the counter hypothesis is that they are not identical.

Table 2. Zero- and counter Hypotheses of the study.

H^o:	$\mu^1 = \mu^2$ or $\mu^1 - \mu^2 = 0$
H^1:	$\mu^1 \neq \mu^2$ or $\mu^1 - \mu^2 \neq 0$, where μ^1, μ^2 are arithmetic means of the sub samples

Individual tests are conducted regarding each of the measured variables. A two-tail Student's t-test is applied. If supported by statistically significant evidence, the zero hypothesis is rejected and replaced by the counter hypothesis. In addition to quantitative measures, also a descriptive analysis on the case data is performed.

Pooled-variance t-Test for the difference in two means

$$\frac{\bar{X}_1-\bar{X}_2)-(\mu_1-\mu_2)}{\sqrt{S_p^2\left(\frac{1}{n_1}+\frac{1}{n_2}\right)}} \quad \text{where} \quad S_p^2=\frac{(n_1-1)S_1^2+(n_2-1)S_2^2}{(n_1-1)+(n_2-1)}$$

and

S_p^2 = pooled variance
S_1^2 = variance of the sample from pop.1
S_2^2 = variance of the sample from pop. 3
$\bar{X}_1$ = mean of the sample from pop. 1
$\bar{X}_2$ = mean of the sample from pop. 2
n_1 = size of the sample 1
n_2 = size of the sample 2

Figure 7. Pooled-variance t-test for the Difference in two Means. Source: Levine et al. (2003).

5. CUSTODY SERVICES: EASTERN MARKETS

As clients start connecting to new markets and trading venues, custodians will need to support them with adequate post-trade solutions. According to Pierre Willems, a BNP Paribas securities services professional, consistency in the service quality is essential. Despite the fragmentation of the trading venues, custodians must ensure that the process of clearing and settlement remains seamless (European Custody Market Guide 2007-8). At the European level, it is expected that the bigger markets of today will also remain as the bigger markets of tomorrow. However, the Central and Eastern European countries are gaining on, Willems adds. According to Johan Wennerber, Handelsbanken Vice President, the single European currency *Euro* will play a large role in the years to come. In the future, the countries who have adopted the Euro will have an advantage over the non-Euro countries (European Custody Market Guide 2007-8). Moritz Ostwald from BHF-Bank underlines the importance of the regulation environment: "The current initiatives such as *Target 2 Securities, MiFid,, Giovannini barriers* (Appendix 3) and *SEPA* offer Europe the opportunity to create a single securities clearing and settlement market similar to that already existing in the United States. What the future will look depends on the way in which is initiative is implemented in the European countries" (European Custody Market Guide 2007-8).

5.1 Attractiveness Of The Custody Market

The CEE stock markets are attracting more and more interest, and their role regarding international portfolio diversification has grown (Syllignakis & Kouretas, 2006). Since the opening of local capital markets, foreign investors direct and portfolio investments from abroad have risen remarkably. The stock markets of CEE have attracted enormous attention from institutional and private investors (Schröder 2000).

While the Central and Eastern European markets are yet relatively immature, they exhibit annual growth rates well above those of developed markets'. Given these significant growth prospects, asset sizes invested to CEE markets are expected to grow. In order to be among the primary service providers in the future when this happens, initial investments are necessary (Investor Services Journal, 2007a). This is exactly the reason why Western service providers find it important to be early established on these markets.

In order to become a successful service provider in this region, one needs to have good connections to other market operators. "In these markets, the local players tend to know one another. Personal recommendations (in the form of Word-Of-Mouth), do often sell a good product quickly. Custody is a relationship-driven business, and it takes time to build credibility" (Investor Services Journal, 2007a). This perception is supported by Global Custodian (2007): Co-operation between custodians and sub-custodians is common. According to Investor Services Journal (2006), competition and consolidation of the market across CEE lies ahead.

Investor Services Journal (2007a) posits that a good example of the potential in the Eastern Europe is Poland. The Baltic states (Estonia, Latvia, Lithuania) also cater for numerous opportunities: Other countries becoming increasingly attractive in terms of wealth include the Czech Republic, Hungary, Bulgaria and Romania. The CEE region is to be watched as there is a rising demand for custodial services within this area. Improved access, services and products are sought to support growth (Investor Services Journal, 2007a).

5.2 Lack of Standardization: A major Headache for Custodians

Providing custody services in the Eastern markets is not a straightforward process. The custody environment is a lot different from that of developed countries, which poses several challenges to the service provider. Overall, the lack of an *adequate regulatory environment*, commonly accepted *market standards* and *systematic application of law* can become large problems (Investor Services Journal, 2007a).

According to Global Custodian (2007), especially regulatory and tax idiosyncrasies can become major headaches. Uniformity - or at least some degree of standardization – are desperately longed for. Even though there can be laws or rules in the books, they may be vaguely written and open to interpretation. However, it is the enforcement, instead of the actual letter of the law, that matters the most (Pistor et al., 2000; Pajuste 2002). "Large numbers of laws and regulations have been adopted over a very short period of time, with courts and enforcing agencies struggling to keep pace with the speed of transformation in the law on books" (Berglöf & Pajuste, 2005).

The lack of standardization is inherent also in corporate events: These rarely come without problems. The primary reason to this is the fact that information in these markets isn't readily available to all market participants (Global Custodian, 2007). It can well be the case that notices regarding annual general meetings, or other important bulletins, never reach the shareholders. Thus, it is not a surprise that a lot of concern about minority shareholders and the protection of their rights has arisen (Investor Services Journal, (2005). However, in order to attract foreign capitals, the CEE economies have tried to adapt their standards to the international ones (Syllignakis & Kouretas, 2006). Especially the firms' disclosure practices have improved. According to Pajuste (2002), the evidence suggests that the enforcement of financial regulations (including minority shareholder protection) has a positive impact on stock market activity.

According to various sources (Investor Services Journal 2005, Investor Services Journal 2007b, Global Custodian 2007), a host of other challenges are also faced. These challenges relate to:

1) *Currency Risk.* Many of the countries studied have their own national currency, implying that trading and trade clearing is conducted in that local currency.
2) Lack of *nominee accounting / registration.* In some countries, this concept is not recognized, and registration is required at an individual firm level. In addition, the account opening procedures can be extremely troublesome in terms of time consumed.

3) *The heavy documentation requirements* by local authorities. Often the authorities are extremely inflexible in their interpretation of the required documents.

4) Certain business structures (trusts or partnerships) are not even identified on all markets.

5) Deficiencies in basic understanding regarding industry concepts, such as *global custodian.* The status of a global custodian may not be recognized; the relationship of such service provider and client is not understood.

6) Lack of a commonly recognized *Central Securities Depository* (currently a large problem in the Czech Republic, for example)

7) Other administrative and operational hindrances

According to Ms. Tiina Närekorpi, an Eastern markets custody –specialist at Handelsbanken, the processes of clearing and settlement on the Eastern markets includes a lot of manual work. “Especially markets such as Ukraine and Kazakhstan, where the trades are settled as Free-Of-Payment, are extremely laborious from a custody perspective. Whereas in a normal DVP-environment the funds are distributed against the securities, this doesn’t hold when FOP-method is employed. In order to settle the trades in an adequate manner in a FOP-environment, a custodian must remain highly alert throughout the process.”

5.3 Adoption Of The Swift Utility On The Target Markets

One of the main issues currently under discussion is the adoption of the SWIFT utility: Though widely applied within the banking sector, the local CSDs and stock exchanges still may prefer using proprietary communication networks and protocols (Investor Services Journal, 2005).

In Ukraine, for example, the SWIFT utility isn't even recognized as a legal means of communication. "Every time you do a transaction, three copies of a purchase and sale agreement have to be signed by all parties to the transaction. They audit you if you don't have them onsite" (Global Custodian, 2007).

Regional providers have to be provided with additional details regarding the SWIFT instructions: Straight-Through-Processing (STP) is only implemented as far as local conditions allow (Investor Services Journal, 2005). In order to win ground, the SWIFT society has to convince these market participants to change their systems and invest in the utility.

6. COUNTRY PROFILES – TARGET MARKETS

In this section, a short description of each transition country covered in the survey is provided. The countries covered are: Belarus, Bulgaria, Czech Republic, Croatia, Estonia, Kazakhstan, Latvia, Lithuania, Poland, Romania and Uzbekistan. In addition, a special report is included on the Baltic countries (Estonia, Latvia, Lithuania) and Poland as they were the markets that received the most of the interest.

Central and Eastern European countries share common characteristics not only in relation to their geographical location, but also in many other ways. For example, their economic and political experiences are very much alike (Devyzis & Jankauskas, 2004). However, according to Syllignakis & Kouretas (2006), decisions regarding asset allocations into the CEE markets are not this straightforward: For example, large deviations regarding local markets' level of integration with the global markets exist.

The chapter will begin by providing an aggregate overview on the target market. After this, an introduction to the Baltic markets and Poland will follow. Finally, each of the remaining markets is covered briefly.

6.1 General Overview On The Eastern Markets

The below table will provide the reader with the basic information of all Eastern markets studied in this Thesis. The countries are put into an alphabetical order.

Table 3. Population, Area, GDP/Capita and Private Sector Share Of GDP on the target markets. Sources: Finpro Market Profiles (2007), EBRD Country Fact Sheets (2007).

Market	Population (m.)	Area ('000 sq km)	GDP/Capita ($)	Private sector share of GDP %
Belarus	9,8	207,6	7 903	25
Bulgaria	7,8	111	8820	75
Czech Republic	10,3	78,9	21203	80
Croatia	4,4	87,6	13185	60
Estonia	1,35	45	16203	80
Kazakhstan	15	2728	8536	65
Latvia	2,3	64,5	13595	70
Lithuania	3,5	67	14340	75
Poland	38,3	313,9	13996	75
Romania	21,7	238	9165	70
Uzbekistan	26	448,9	2074	45

The Eastern markets cover a huge geographical area; Altogether, these 11 countries have an aggregate area of 4400 square kilometers. However, was Kazakhstan with its vast steppes to be excluded, would this amount drop to less than half of the original. The mean GDP per capita of the studied sample is only $ 11 700 (Finpro market profiles, 2007). The gap between the two extremes is quite remarkable; whereas an average citizen in Uzbekistan only makes $ 2 074 a year, the corresponding figure in the Czech

Republic is more than tenfold, amounting to $ 21 203. This is one of the reasons why the target countries each have their own special characteristics to them.

The researcher made an interesting discovery while studying the data. There seems to be high correlation between *GDP per capita* and the *Private sector share of GDP* among the countries studied. As the above graph clearly demonstrates, the higher the country's private sector's share of GDP, the higher the GDP per capita and vice versa. An instant question arises: Could the countries with the lowest GDP per capita, such as Uzbekistan and Kazakhstan, start prospering if the private sectors were given larger roles in the construction of the economies?

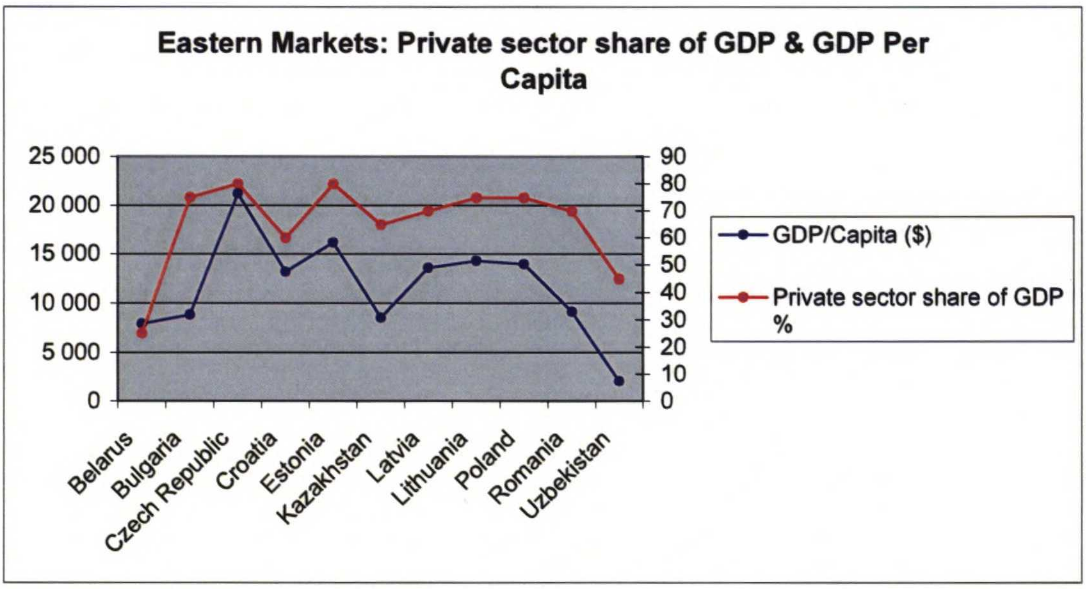

Figure 8. The relation between private sector share of GDP & GDP per capita on the Eastern markets. Source: EBRD country fact sheets 2007.

6.2 The Baltic Countries

After the fall of the *Iron Curtain,* the geopolitical changes taking place on the Baltic area have been remarkable. Whereas Russia's vast market has attracted a host of foreign companies, the Baltic countries have had to settle with a lot less. The Baltic countries, i.e. Estonia, Latvia and Lithuania are scarce in natural resources and low in population (Heliste et al., 2007). However, as the Baltic markets haven't yet attracted competition, there's a lot of potential to be exploited. Even though all the Baltic countries joined the European Union in 2004, operations on these market places are far from trouble-free. According to Heliste et al., one of the reasons is the fact that the local expertise within the financial and IT-branches are highly deficient. In addition, a lack of international experience strongly affects the trading ambience.

6.2.1 Estonia

Estonia's economy, supported by a strong domestic and foreign demand, is sustaining its healthy growth rates. In 2006 the Real GDP growth amounted to 11,4%, compared to 10,5% the year before. The main sources of growth are net exports, investments and private consumption. Increased employment rates and real wages, along with rapid growth in credit, underlay this positive development (EBRD Country Fact Sheet 2007, Estonia).

According to the EBRD, unfavorable prospects regarding the demographics and migration make labor shortages a true concern for Estonia. In addition, some inflationary pressures also prevail in the country. However, the future outlook for the overall economic development in Estonia remains promising.

Estonia's principal trade parners are the neighboring countries Finland and Russia along with Sweden and Germany. According to Spiridovitsh (Finpro Market Profile Estonia, 2007), country's primary exports are made of textiles, timber, minerals and food supplies.

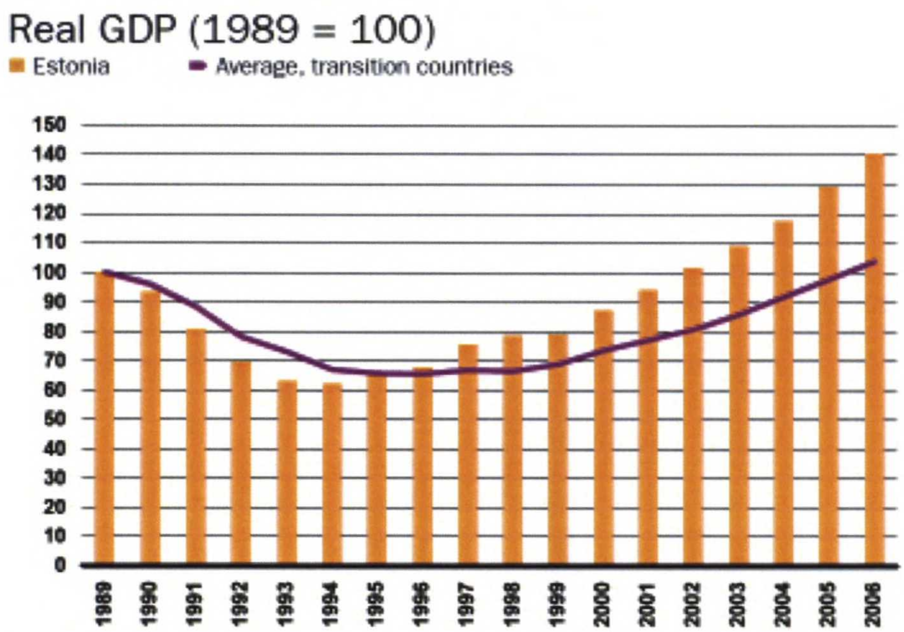

Figure 9. Real GDP -development in Estonia (2006). After a milder period in the beginning of the 1990's, the development during the past years has outperformed the reference group's average. Source: EBRD country fact sheet, Estonia.

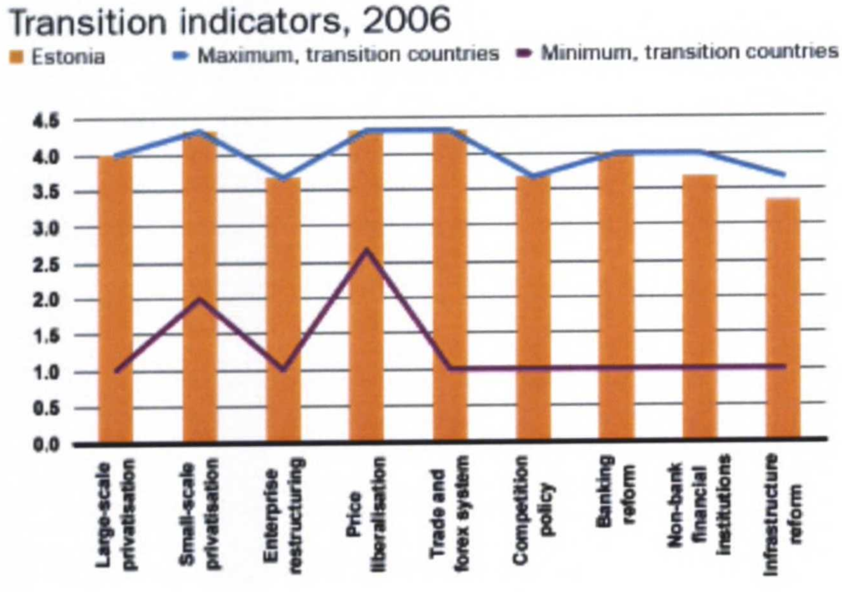

Figure 10. Transition Indicators of Estonia (2006). The transition indicators range from 1 to 4+, with 1 representing little or no change from a rigid centrally planned economy and 4+ representing the standards of an industrialised market economy The graph demonstrates the fact that Estonia has been performing extremely well within the reference group. Source: EBRD country fact sheet, Estonia.

6.2.2 Latvia

The Real GDP in Latvia has been rising rapidly in 2005 and 2006. The real growth reached 10,2% and 11,9% in 2006 respectively. The growth is broad-based, the strongest industries being trade, commercial services, transport and communications (EBRD country fact sheet 2007, Latvia)

Especially the strong domestic demand continues to support the growth rates. However, a resurgence in the inflationary pressures has occurred: Continued credit expansion could further exacerbate the situation. According to EBRD (2007), this is certainly something to be avoided. Excess inflation, ceteris paribus, could also delay the process of joining the European Economic and Monetary Union.

The primary export products of the country are timber, metals and metal products along with food supplies and farm products. Machinery and transportation vehicles, coupled with mineral products, make up for the majority on the import side. The principal trade partners are Germany, Lithuania and Russia (Spiridovitsh, Market Profile Latvia, 2007).

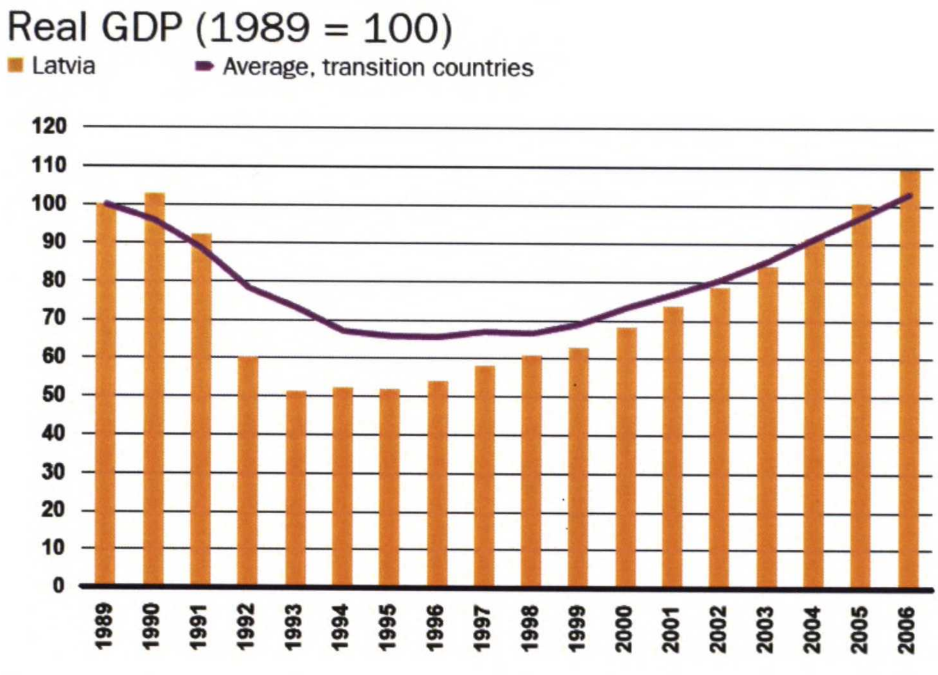

Figure 11. Real GDP -development in Latvia (2006). The development during the past years has moved in tandem with the reference group's average. Source: EBRD country fact sheet, Latvia.

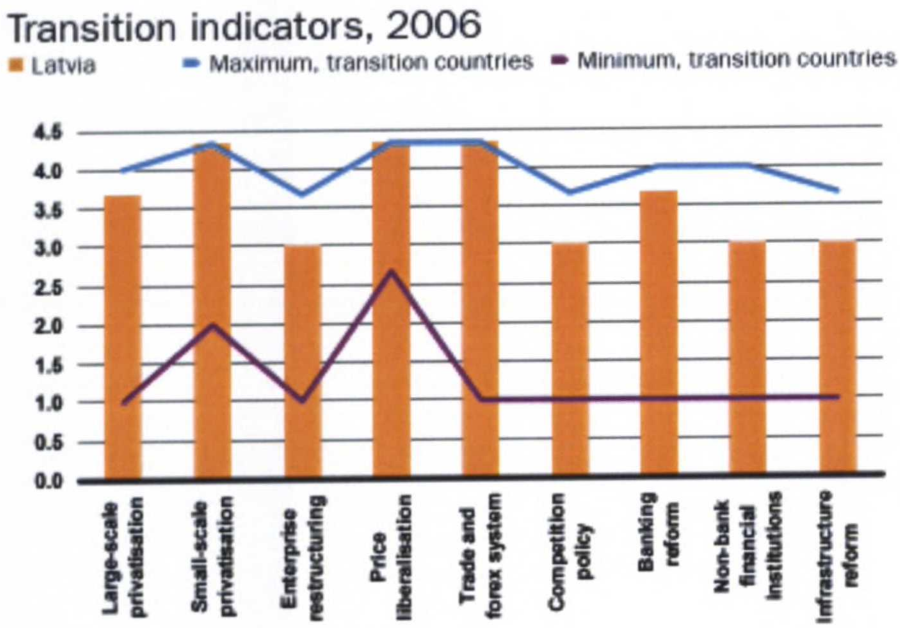

Figure 12. Transition Indicators of Latvia (2006). The graph demonstrates the fact that Latvia has been performing quite well within the reference group. Source: EBRD country fact sheet, Latvia.

6.2.3 Lithuania

The real economic growth in 2006 was somewhat smaller than that of Latvia; it only reached an annual level of 7%. According to the EBRD (Country Fact Sheet, 2007), strong domestic consumption, coupled with good domestic investment rates, were the main drivers of growth. In addition, country's unemployment rates have declined.

Lithuania strives to maintain a prudent fiscal policy in order to control inflation and thus adhere to the Maastricht Criteria of the European Union (EBRD Country fact sheet 2007, Lithuania). The exports consist mainly of machinery, farm products and food supplies along with textiles. On the import side oil, transportation vehicles and chemical products play a major role. The main trade partners are Russia, Germany and Latvia (Spiridovitsh, Market Profile Lithuania, 2007).

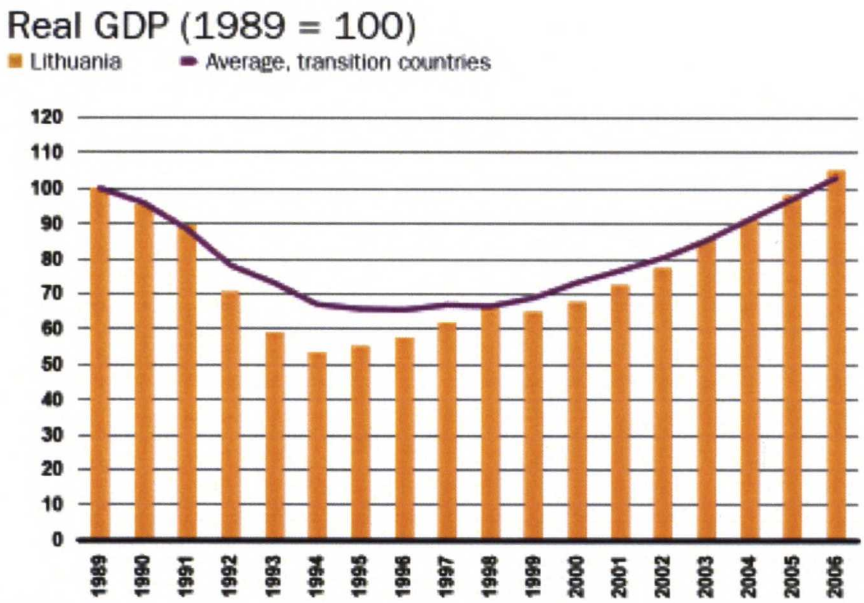

Figure 13. Real GDP -development in Lithuania (2006). The development during the past years has moved in tandem with the reference group's average. Source: EBRD country fact sheet, Lithuania.

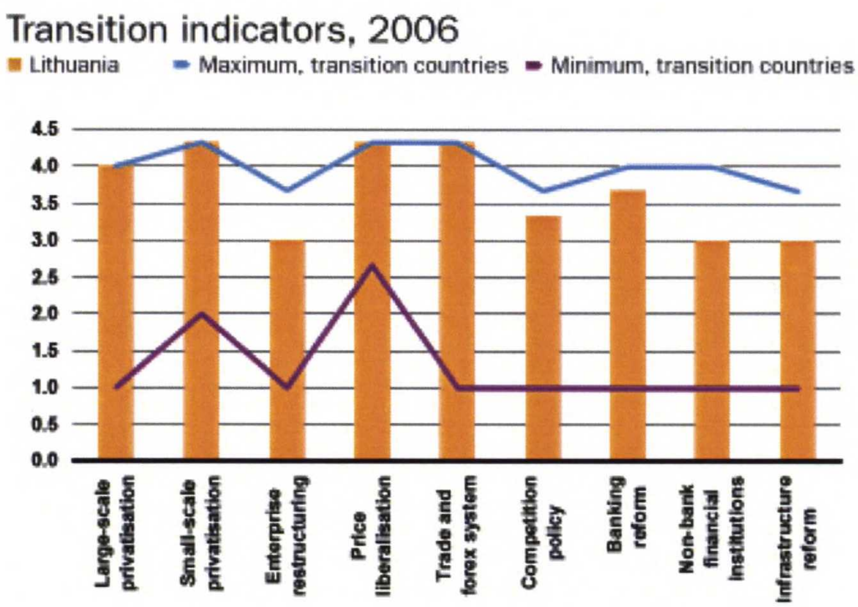

Figure 14. Transition Indicators of Lithuania (2006). The graph demonstrates the fact that Lithuania has been performing extremely well within the reference group. Source: EBRD country fact sheet, Lithuania.

6.3 Securities Trading Environment in The Baltic

"The Baltic Market is positioned at the heart of Baltic Sea region, Europe's fastest growing market. An excellent business environment provides solid growth opportunities for new and existing companies, generating exceptional opportunities for investors" (NASDAQ OMX Group homepage, 2008). The Baltic stock exchanges are nowadays operated by the *NASDAQ OMX Group,* the world's largest exchange company.

According to Andrus Alber, Chairman for the Tallinn Stock Exchange Management Board, the Baltic market provides a high quality, efficient and a secure marketplace. It is regulated by global standards and powered by application of leading edge technology (OMX, 2007).

The Baltic countries have their own stock exchanges and central securities depositories; a full list of them is provided as follows. The aggregate number of 101 companies listed in these exchanges are worth more than € 16 billion together.

Table 4. The Stock Exchanges and the Central Securities Depositories (CSDs) of the Baltic Countries. An Extract from www.lv.omxgroup.com.

The Baltic Investment Region

General Information

Population: 7,01 Million

101 companies; a total Market capitalization of 16,12 billion

40 Stock Exchange Members

Stock Exchanges

Tallin Stock Exchange
Riga Stock Exchange
Vilnius Stock Exchange

Central Securities Depositories

Estonian Central Securities Depository
Latvian Central Depository
Central Securities Depository of Lithuania

As the below graph presents, the development on the Baltic market has been impressing during the past decade. The *OMX Baltic Benchmark General Index*, displayed by the graph, has risen from 100 points in 2000 to more than 600 in 2008. As Heliste (2007) posited, there is a lot of potential to be exploited in the Baltic markets.

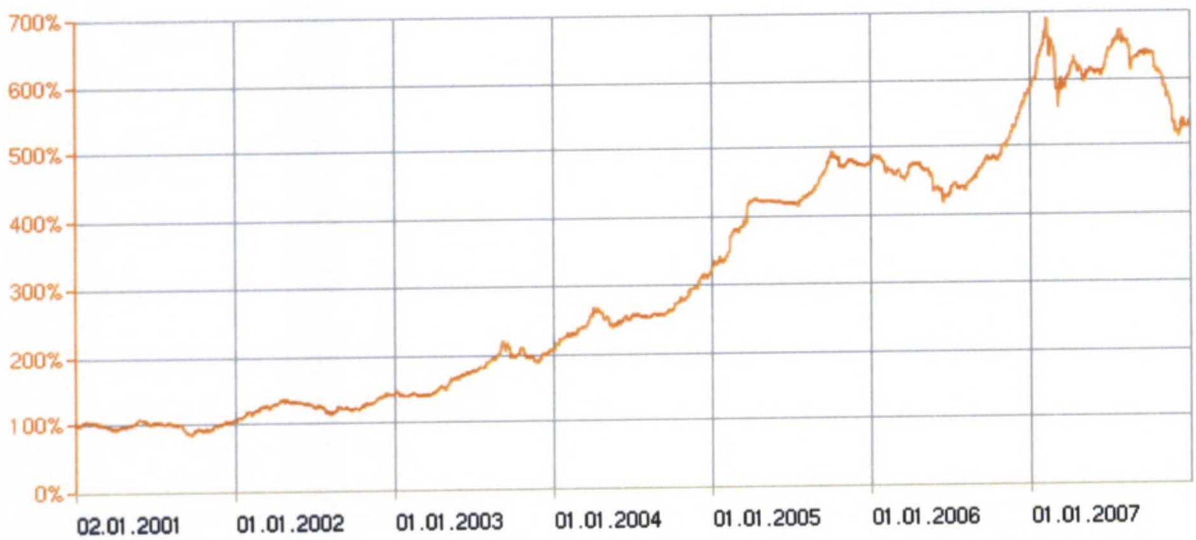

Figure 15. OMX Baltic Benchmark General Index between 01/2000 and 02/2008. During this period of time, the Index has risen from 100 points in 2000 to more than 600 points in 2008. An Extract from www.baltic.omxgroup.com.

In this context, the following observation is worth a notion: The development of the Baltic stock market indices seem to go hand in hand with each other. As the graph below illustrates, small deviations from the general development in the area (illustrated by the orange line) are found, but generally all the three indices move in tandem.

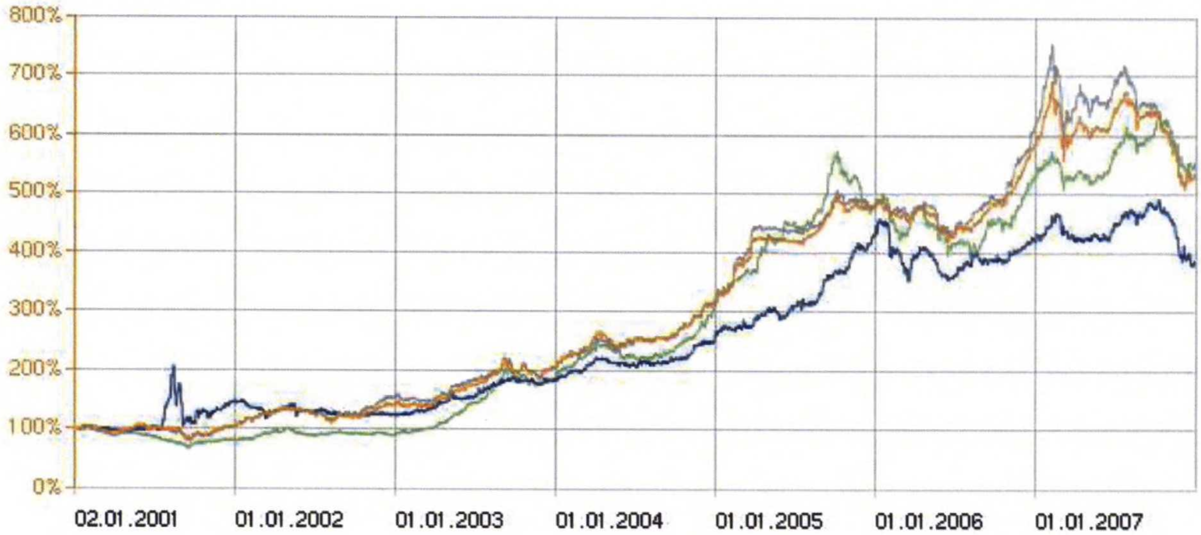

Figure 16. The Baltic Stock Indices between 01/2001 and 12/2007. Orange line is a description of the general index, whereas green is for Lithuania, blue for Latvia and grey for Estonia. Worth notion is the fact all the indices seem to move in tandem with each other. An extract from www.baltic.omxgroup.com.

In order to attract more international members, all the Baltic countries use the widely applied SAXESS-trading system. The same system is used at all OMX exchanges as well as in the Oslo Bors. This implies the fact that the exchange members can trade on the Baltic market without having to incur any additional technology costs (OMX, 2007). The Baltic countries aim to facilitate efficient cross-border trading and settlement within Estonia, Latvia and Lithuania. For example utilizing a common trading system (SAXESS) and harmonizing trading hours make the Baltic region more accessible and attractive to investors. To settle the cross-border trades in a smooth manner, the exchanges also offer an advanced, seamless Delivery-Versus-Payment (DVP) link connecting the three market places (OMX, 2007).

There are altogether six different sub-custodians present in the Baltic market place. In Latvia there are three banks present, whereas in Lithuania and Estonia the respective number is only two (International Directory of Custodian Banks, 2008). On both the Estonian and Lithuanian market, SEB is ranked as the number one service provider. In Latvia, HSBC intervenes and takes the first place, leaving SEB second on the market. The following table presents the sub-custodians currently operating in Baltic.

Table 5. The sub-custodians present in the Baltic. According to the International Directory of Global Custodian Banks (2008), SEB is the dominant force in the area ranking first in both Estonia and Lithuania. In Latvia, SEB is left second by HSBC. Source: International Directory of Custodian Banks, 2008.

The List of Baltic Sub-Custodians
Eesti Ühisbank (Estonia)
Hansabank (Estonia, Latvia, Lithuania),
Nordea (Latvia)
SEB (Latvia, Lithuania)
HSBC (Latvia)
Midclear (Latvia)

Offering an advanced delivery versus payment link is but one of the measures taken to allow for efficient trading and settling within the Baltic area. In addition, the local stock exchanges utilize a common trading system, and the trading hours along with -rules and requirements have been harmonized (OMX, 2007).

6.4 Clearing and Settlement in the Baltic

6.4.1 Estonia

Clearing and settlement of securities transactions in Estonia is organized by a single organ; Estonian Central Securities Depository (EVK). EVK, or *Eesti väärtipaberikeskus,* is a public limited company based in 1994 (OMX, 2008).

The settlement cycle of Tallinn Stock Exchange (TSE) trades is T+3. For negotiated trades, the trade counterparties may agree on different terms (T+1...T+6). Interesting is the following fact: The trading currency in TSE is euro (EUR), whereas the settlement currency is Estonian kroon (EEK). When settling the securities transactions, the multilateral net claims of a clearing agent are converted from EUR to EEK by EVK (OMX, 2008).

6.4.2 Latvia

Clearing and settlement in Latvia is organized by the Central Securities Depository of Latvia. The local Central Securities Depository, or *Latvian Securities Depository* (LSD), is a joint stock company based in 1995. One of the main functions of the LSD is to provide for a secure and effective environment for securities transactions (OMX, 2008).

Automatically matched trades at the Riga Stock Exchange (RSE) are settled three days after the trade (T+3). However, as in Estonia, the settlement times of RSE negotiated deals may vary quite significantly. The settlement cycles of such trades reach from same-day settlement (T+0) to almost six weeks (T+40).

According to OMX (2008), The official currency used in trading and settlement is the Latvian Lati. However, trades in the RSE can also be effectuated in Euro or USD. In such a case, the settlement currency needs to be the same respectively.

6.4.3 Lithuania

Clearing and settlement in Lithuania is performed by the Central Securities Depository of Lithuania (CSDL). The CSDL first started its operations as a sub division of the Vilnius Stock Exchange (VSE), but was separated from it in 1994. Nowadays CSDL is an independent institution denoted as a *special purpose public company (OMX, 2008).*

The general settlement cycle of VSE trades is T+3. However, as in the other Baltic countries, the trade settlement on manual trades may vary. In Lithuania, the settlement cycle for such trades extends from T+1 to T+6. In addition, the settlement cycle on the government debt securities is T+1 instead of T+3. The trading and settlement currency of VSE trades is the Lithuanian Litas (LTL) (OMX, 2008).

6.5 Market Profile, Poland

After the collapse of the Soviet Union, the change from a planned economy to a free market economy started rapidly. Over the past 17 years, the Polish business environment has changed significantly. This is primarily due to the extensive privatization processes of government property and the introduction of market economy principles. Also the internationalization of the local business has been remarkable, contributing to the change as well (Heliste et al., 2007).

In the past years, Poland has been exhibiting moderate real growth rates. The growth has largely been fuelled by the abundant investment flows coupled with moderate inflation levels. However, Poland still exhibits the highest unemployment rates in the European Union (EBRD Country fact sheet Poland, 2007).

The real GDP growth increased more than 50% from 3,5 percent units in 2005 to 5,8 in 2006. Along with the strong investment flows in the country, the economy is driven by high domestic consumption. According to EBRD (2007), especially the construction industry made a significant contribution to the growth expanding by a whole 14,6% in 2006.

Poland's primary export products are machinery and transportation vehicles coupled with chemicals and food supplies. The principal trade partners of the country are Germany, Russia and Italy (Wilen, Market Profile Poland, 2007).

Despite the ongoing rapid change, the Polish business environment can still be seen very challenging. Particularly the public sector corruption and heavy bureaucracy contribute significantly. On the other hand, as the following graphs will demonstrate, the Polish economy grows at a dazzling pace. This, along with its potential gateway-position to the Russian market make it a very attractive market. Worth mentioning is the fact that in 2004, Poland joined the European Union. This has also strengthened foreign companies' trust in the country; however, the Polish business environment is still closer to that of Russia than those of the Baltic countries (Karhunen et al., 2003).

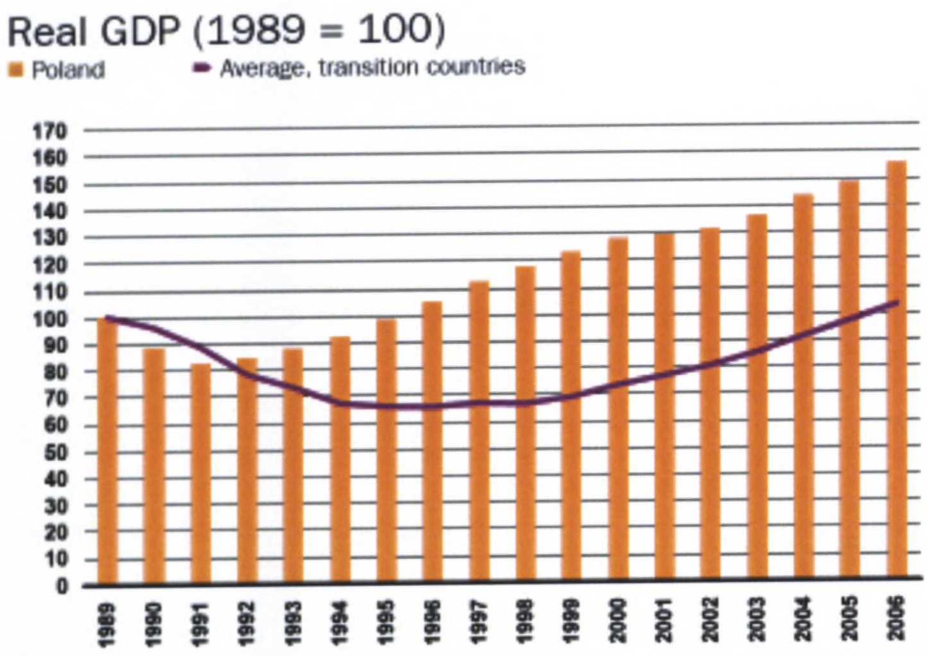

Figure 17. Real GDP -development in Poland (2006). Even though Poland has an above average - GDP, the development during the past years has moved in tandem with the reference group's average. Source: EBRD country fact sheet, Peland.

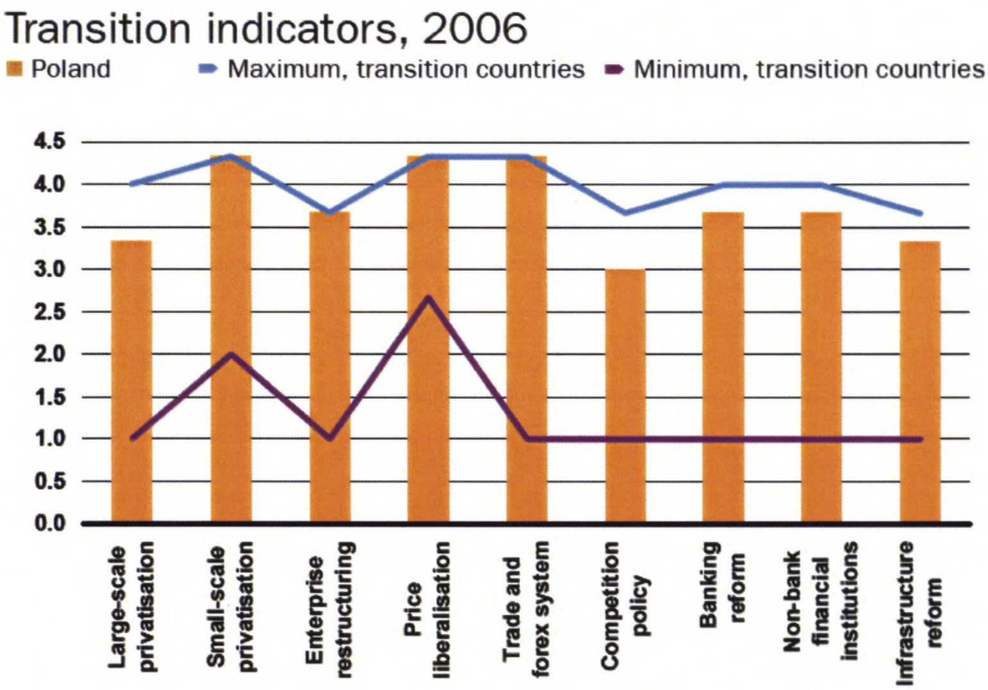

Figure 18. Transition Indicators of Poland (2006). The graph demonstrates the fact that Poland has been performing extremely well within the reference group. Source: EBRD country fact sheet, Lithuania.

6.6 Securities Trading Environment in Poland

There is one organized place for securities exchange in Poland: *The Warsaw Stock Exchange* (WSE). WSE began its operations on April 16th, 1991: From the very beginning, it has been operating an electronic trading system.

Clearing and settlement of securities transactions are performed by two different bodies: National Depository for Securities (Equities and Bonds) and Securities Registrar at the National Bank of Poland (T-bills). The settlement cycle is T+3 for equities and T+2 for bonds. Settlement instructions must be sent to NDS by SD-1 (the day prior to settlement day) at 18.30 local time. The settlement is organized on a DVP (Delivery-Versus-Payment) –basis (Unicredit Market Profile, Poland 2008).

As the graph below demonstrates, the Polish stock market has been experiencing significant growth during the post-Soviet era. Even though the growth has not been linear, the trend is not subject to questioning. According to Warsaw Stock Exchange Annual Report (2006), "*The bullish market has a strong foundation.. The long-term growth is rooted on the steadily rising performance and financial results of enterprises*".

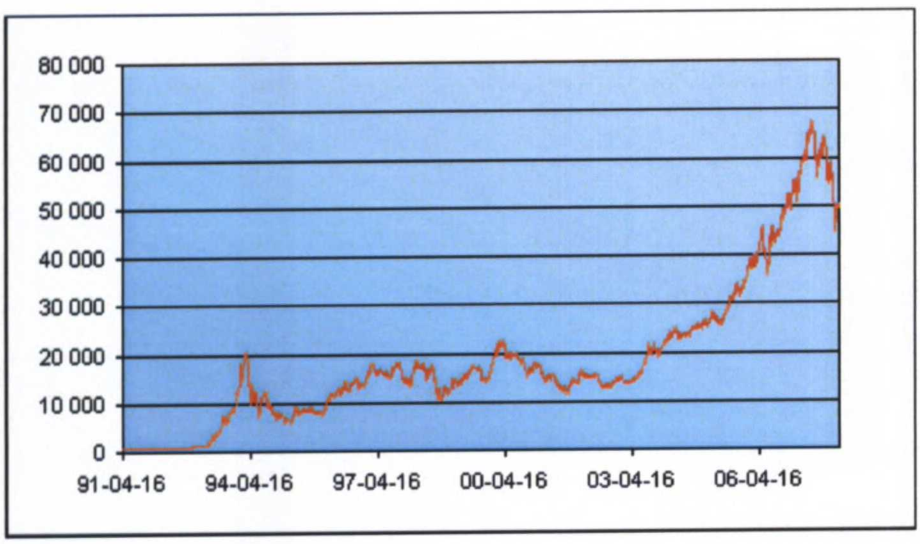

Figure 19. WIG-Index of the Warsaw Stock Exchange. Includes dividends and pre-emptive rights. WSE home page, 2008.

The base-value of the WIG-Index at its inception on April 16th in 1991 was 1000 points. It peaked in July 2007, reaching a value of 67 568,51 points. The current market capitalization of the exchange is € 180 billion.

As of today, there are 8 sub-custodians providing custody services on the Polish market. These custodians in an alphabetical order are: *Bank Millennium SA.., Citi, Deutsche Bank, Ing Bank Slaski, Kredyt Bank Poland, Raiffeisen Zentralbank, Société Générale and Unicredit Markets and Investment Banking.* Out of these, Bank Millennium SA. is ranked number one on the market . The second place goes to Deutsche Bank whereas Ing Bank Slaski places third (International Directory of Custodian Banks, 2008).

According to Global Custodian (2007), the biggest nightmare in the more mature markets of Central and Eastern Europe (including Poland) is corporate events. This is due to the fact that on these markets, information is not readily accessible to all the users of the system. According to European Custody Market Guide, the quality of asset servicing will remain a key criterion to success. "Local specifics on taxes and corporate actions will be hard lived...and market proximity will continue to be a differentiator". In general, according to a Handelsbanken corporate actions specialist Mr. Paulus Palola, the most challenging tasks relate to *tender offers* and *mergers and acquisitions*. Only time will tell how these events will be handled in the Eastern markets in comparison with the developed markets' practices.

The second biggest problem, as it seems, is *the recognition and application of nominee accounting*. However big the problem with nominee accounting is, there isn't a single country in the world that had a specific law on the nominee concept. Usually it's hidden under a trust agreement (Global Custodian, 2007).

6.7 The Remaining Market Profiles

In this section each of the remaining markets are covered briefly.

6.7.1 Belarus

The output in Belarus continued to grow strongly in 2006. The real Gross Domestic Product of the country increased by 9,9%, reflecting the successful government policies that have stimulated domestic demand. Investment rates were high, having grown a significant 31% from the past year. The same applies to private consumption, which grew in line with a continuing growth in the disposable incomes of households (EBRD Country Fact Sheet 2007, Belarus).

The most important trading partners of Belarus are Russia, Ukraine and Kazakhstan. The primary export articles of Belarus are machines and gadgets, minerals, textiles and food supplies (Spiridovitsh, Market Profile Belarus, 2007). As is typical for transition economies, the success of Belarussian economy is highly dependent on the price of imported gas. According to the EBRD (2007), the high gas prices in 2007 are supposed to widen the trade deficit as well as increase the inflationary pressures.

As the graph below clearly demonstrates, the Belarussian economy has been showing tremendous growth rates the past decade. Between 1989 and 1995 the country suffered under heavy depression, but towards the new millennium it was soon to recover and rise above the average growth rates of transition countries.

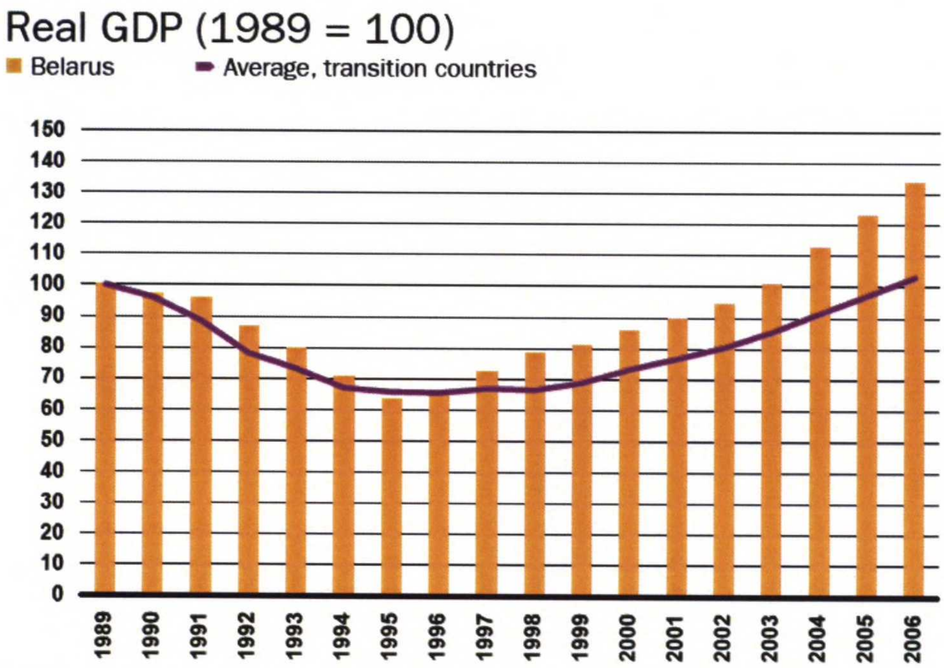

Figure 20. Real GDP -development in Belarus (2006). It is notable that the recent economic development in the country has been clearly above the average rate in transition countries. Source: EBRD country fact sheet, Belarus.

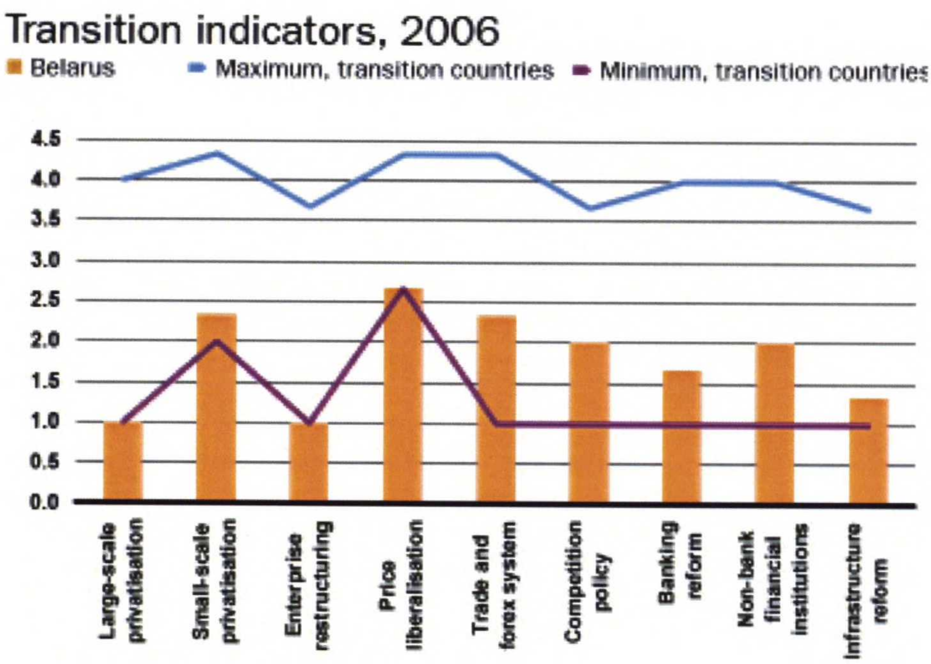

Figure 21. **Transition Indicators of Belarus (2006). The graph illustrates the fact that Belarus has been performing quite moderately in comparison with the reference group in general. Source: EBRD country fact sheet, Belarus.**

6.7.2 Bulgaria

In January 2007, Bulgaria took the step to join the European Union. This is, without a doubt, one of the main reasons why the country's mid-term economic prospects remain positive. Even though the economic trend is clearly upward-sloping, Bulgaria's economy still remains somewhat vulnerable to external conditions. Therefore tight fiscal and income policies are of primary importance in preserving positive figures of macroeconomic stability (EBRD Country Fact Sheet 2007, Bulgaria).

In 2006, the real GDP grew by 6,1%, up by 0,2 per cent units from the year before. According to the EBRD, the growth was mainly fuelled by sustained investment and private consumption, just as in Belarus, too. Underlying this positive development were especially the rising income rates and healthy employment figures.

Bulgaria's primary export articles are iron and steel, metal products, wines and furniture. In addition, vast amounts tobacco are produced in the country (Spiridovitsh, Market Profile Bulgaria, 2007)

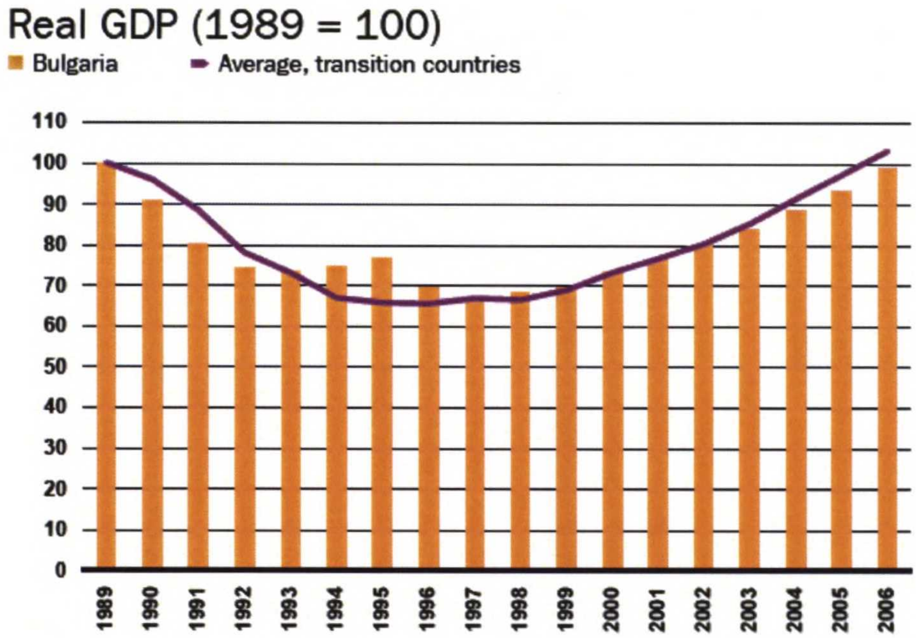

Figure 22. . Real GDP -development in Bulgaria (2006). The development during the past years has been somewhat identical to that in general in the transition countries. Source: EBRD country fact sheet, Bulgaria.

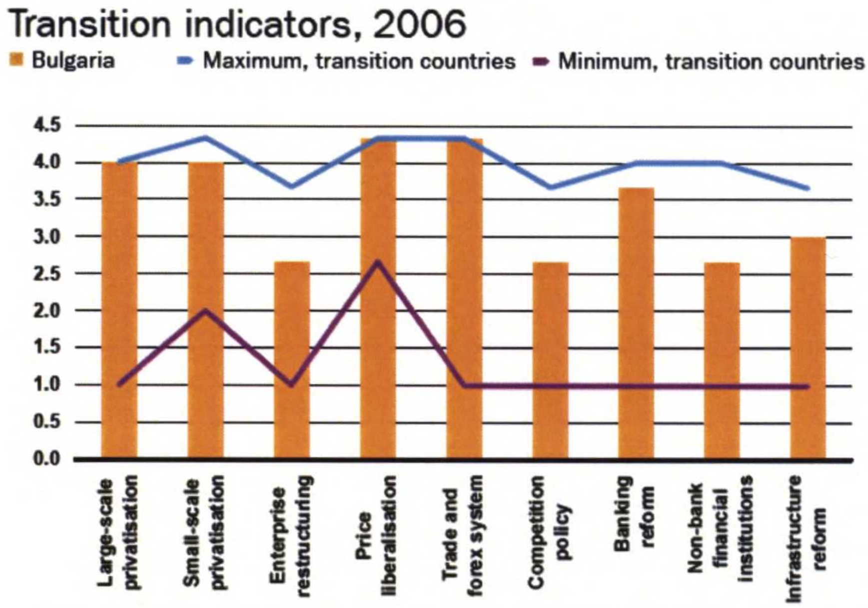

Figure 23. Transition Indicators of Bulgaria (2006). The graph demonstrates the fact that Bulgaria has been performing very well in comparison with other transition countries. Source: EBRD country fact sheet, Bulgaria.

6.7.3 The Czech Republic

Relative to the earlier years, the Czech economy has become more dependent on the domestic demand. Just like in the most other transition economies, the Czech Republic's GDP has been growing the past years steadily, too. However, the future estimates aren't that buoyant. The planned raises in social security expenditures, as well as increased pensions and public sector wages, contribute to the government budget deficit of 3,6% (EBRD Country Fact Sheet 2007, The Czech Republic).

According to EBRD (2007), a political stalemate prevails in the Czech Republic. This makes a timely implementation of structural fiscal reforms unlikely; the planned adoption of the single European currency Euro in 2010 may well remain a far cry.

The Czech Republic's most important trade partners are Germany, Slovakia, Austria, Russia and Poland. According to Wilén (Finpro Market Profile, The Czech Republic, 2007) the country's primary export articles are machines and transport equipment along with metals and metal products.

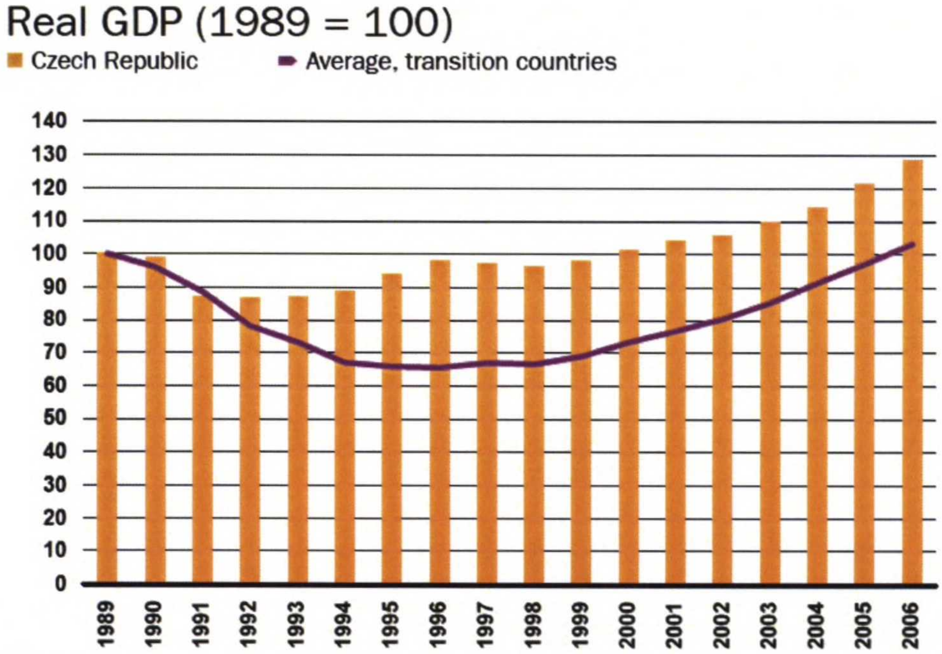

Figure 24. Real GDP -development in the Czech Republic (2006). The development during the past years has been well above reference group's average. Source: EBRD country fact sheet, Czech Republic.

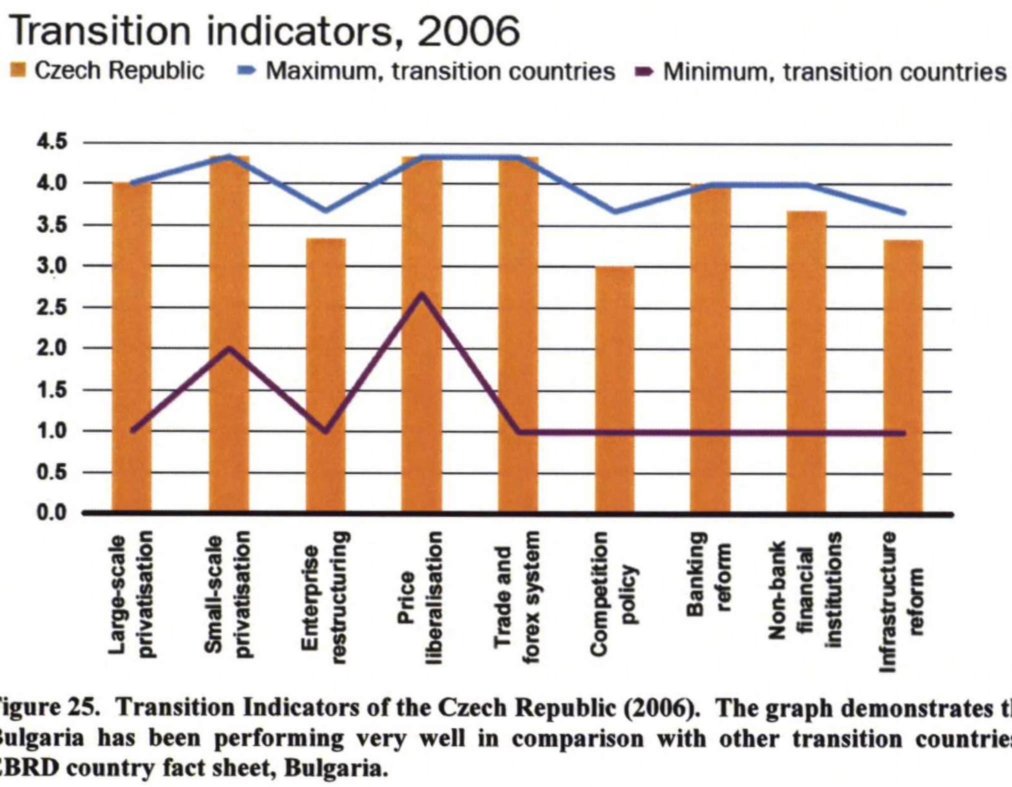

Figure 25. Transition Indicators of the Czech Republic (2006). The graph demonstrates the fact that Bulgaria has been performing very well in comparison with other transition countries. Source: EBRD country fact sheet, Bulgaria.

6.7.4 Croatia

Aided by a positive contribution from gross domestic investment, the Croatian economy continues to enjoy steady figures of growth. However, pressures for increased government spending and high levels of external debt remain as primary sources of risk to the economy (EBRD Country Fact Sheet 2007, Croatia).

According to the EBRD (2007), the Croatian GDP grew by 4,8% in 2006, an increase of one per cent unit from the two previous years. The GDP was estimated to continue growing in 2007, too. The primary drivers of the growth were an increased private investment and good figures from the exports. The tourism sector, making up almost 20% of the GDP, continues to develop in a positive manner.

Russia, Germany, Italy and Slovenia are Croatia's primary trade partners: The country's main industrial products are crude oil, fuels and motor vehicles along with machines and gadgets (Spiridovitsh, Market Profile Croatia, 2007).

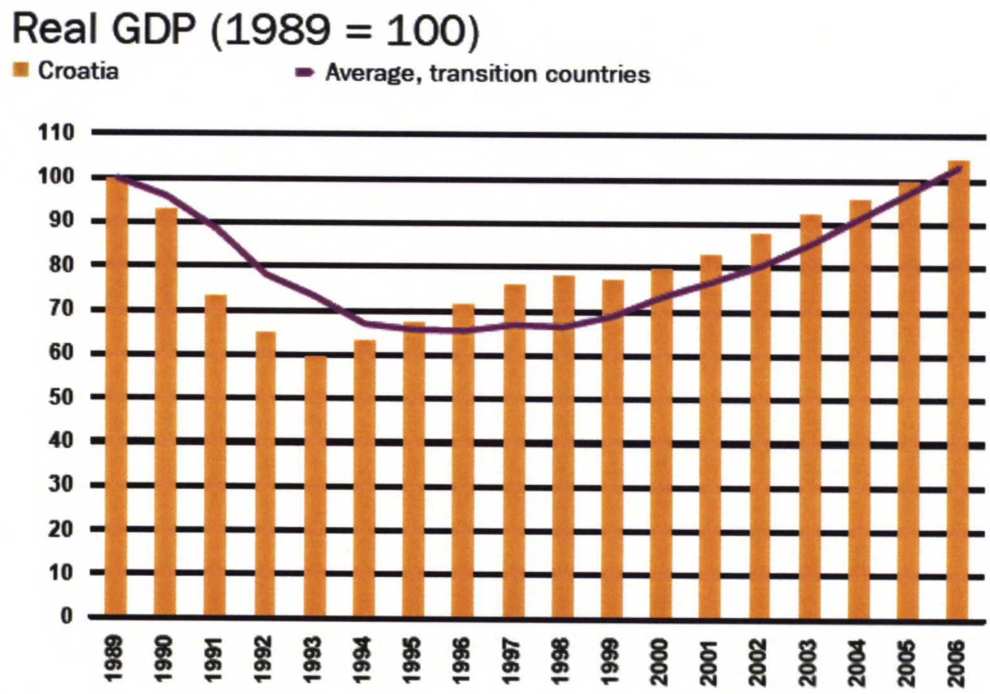

Figure 26. Real GDP -development in Croatia (2006). The development during the past years has moved in tandem with the reference group's average. Source: EBRD country fact sheet, Croatia.

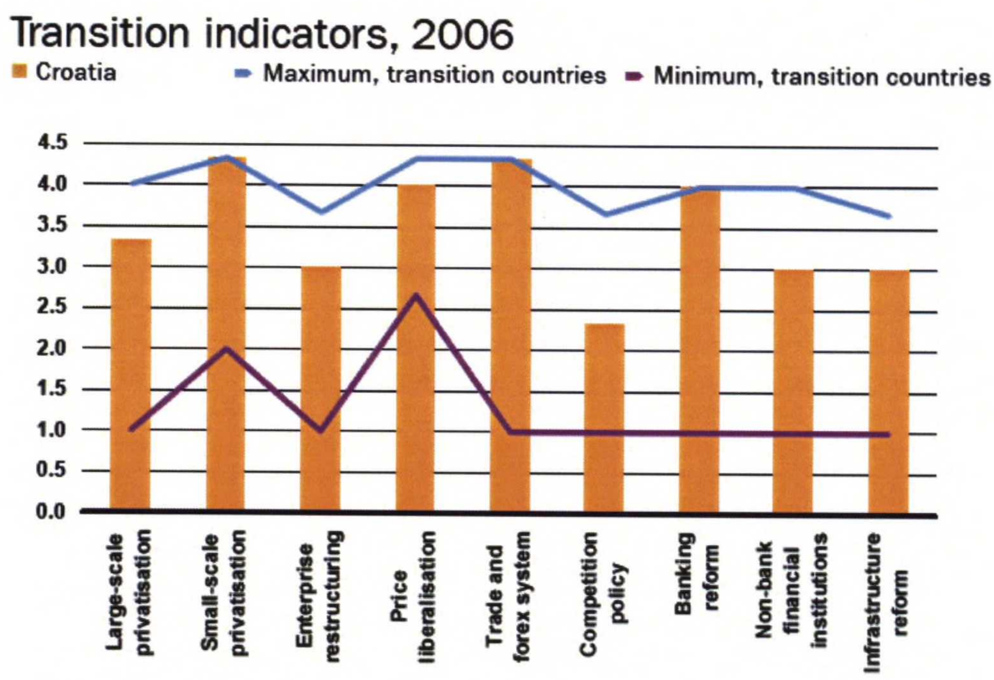

Figure 27. Transition Indicators of Croatia (2006). The graph demonstrates the fact that Croatia has been performing very well in comparison with the reference group. Source: EBRD country fact sheet, Bulgaria.

6.7.5 Kazakhstan

High oil prices, increased fiscal expenditures and an easing of credit conditions have all provided for a solid platform for growth in the Kazakhstan's economy. In 2006, the economy recorded a 10,6% growth rate in GDP; contrary to the intuition, the growth was mainly driven by non-oil sectors, e.g. financial services and construction (EBRD Country Fact Sheet 2007, Kazakhstan).

As a large provider of crude oil, the country's economy remains vulnerable to shocks in the commodity's market prices. Due to this, a deceleration of GDP to 8% was expected for the year 2007 (EBRD).

According to Spiridovitsh (Market Profile Kazakhstan, 2007), Kazakhstan's primary exports have been oil, metal, and chemicals along with grain, wool and coal. This comes as no surprise as the country is blessed with extensive amounts of natural resources (including the aforementioned oil, minerals and metals).

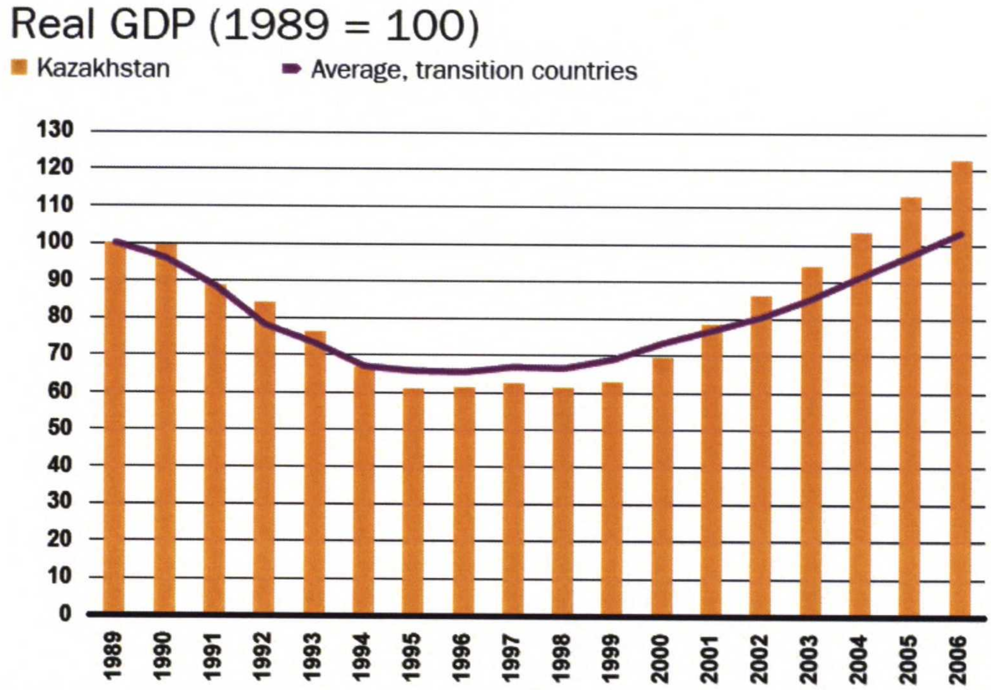

Figure 28. Real GDP -development in Kazakhstan (2006). The development during the past years has moved in tandem with the reference group's average. Source: EBRD country fact sheet, Kazakhstan.

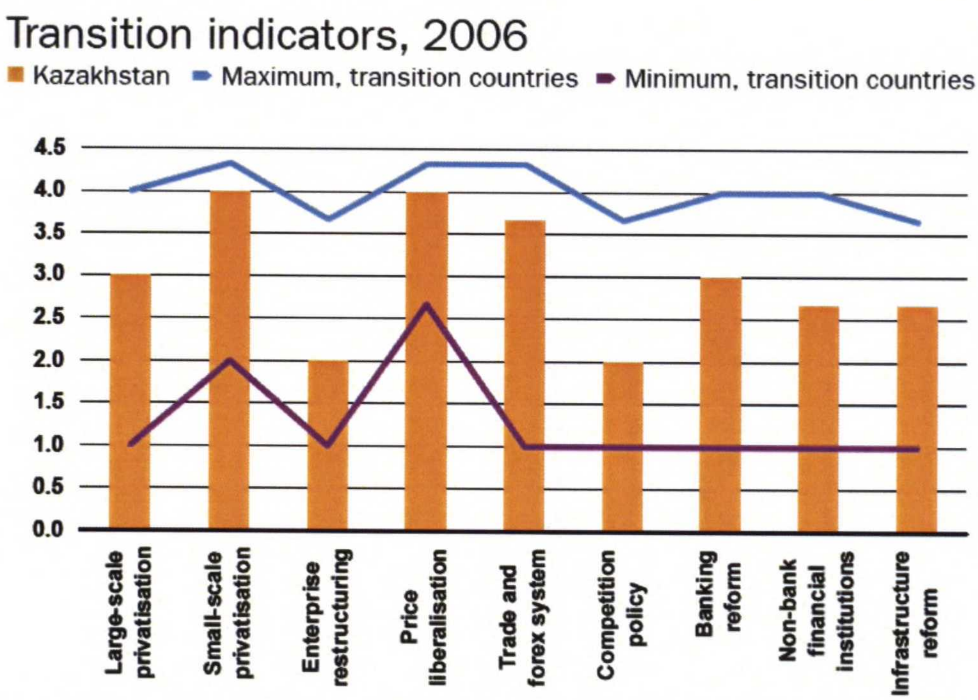

Figure 29. Transition Indicators of Kazakhstan (2006). The graph demonstrates the fact that Kazakhstan has been an average performer within the reference group. Source: EBRD country fact sheet, Kazakhstan.

6.7.6 Romania

In 2004, the Romanian economy recorded an all-time high real GDP growth rate, reaching 8,4% for the first time. However, the growth slowed to 4,1 in 2005, but only to increase back to 7,7 % the year after. Signs of overheating prevailed as the rates of private consumption and investment fuelled the economy's rapid growth (EBRD Country Fact Sheet 2007, Romania).

Romania joined the European Union in January 2007. Completion of a privatization program and enterprise restructurings should ensure continuing economic growth. However, according to EBRD (2007), in order to fight the inflationary pressures arising, consistent fiscal and monetary policies are called for.

Romania's most important industrial products are clothing, other textiles, metals and metal –products. Country's primary trade partners are Italy, Germany, France, Russia, Turkey and the United States of America (Spiridovitsh, Finpro Market Profile Romania, 2007).

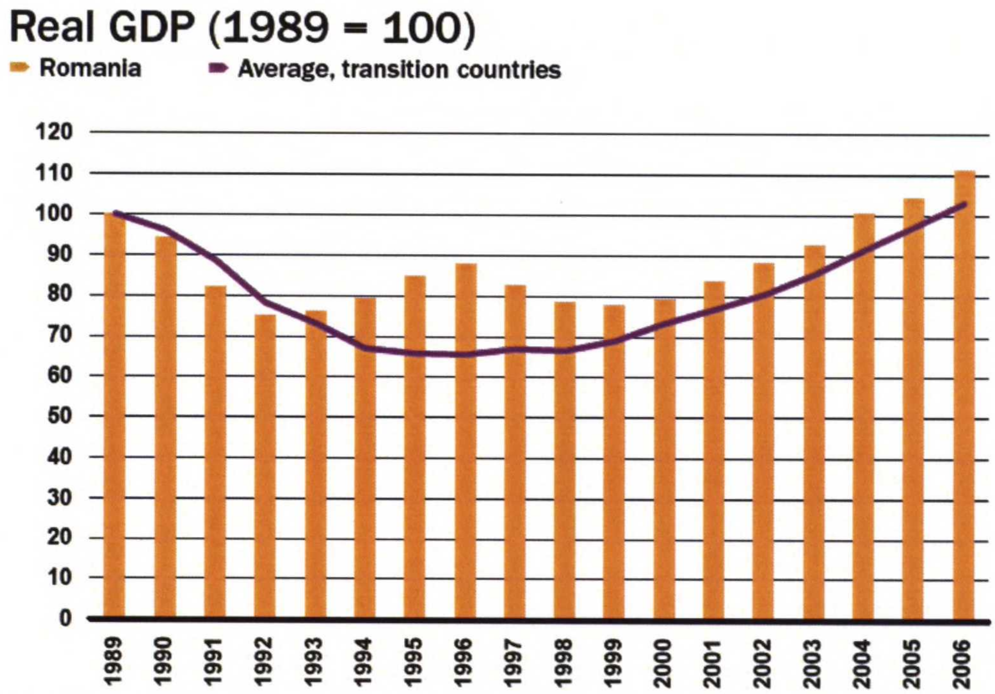

Figure 30. Real GDP -development in Romania (2006). The development during the past years has moved been slightly above the reference group's average. Source: EBRD country fact sheet, Romania.

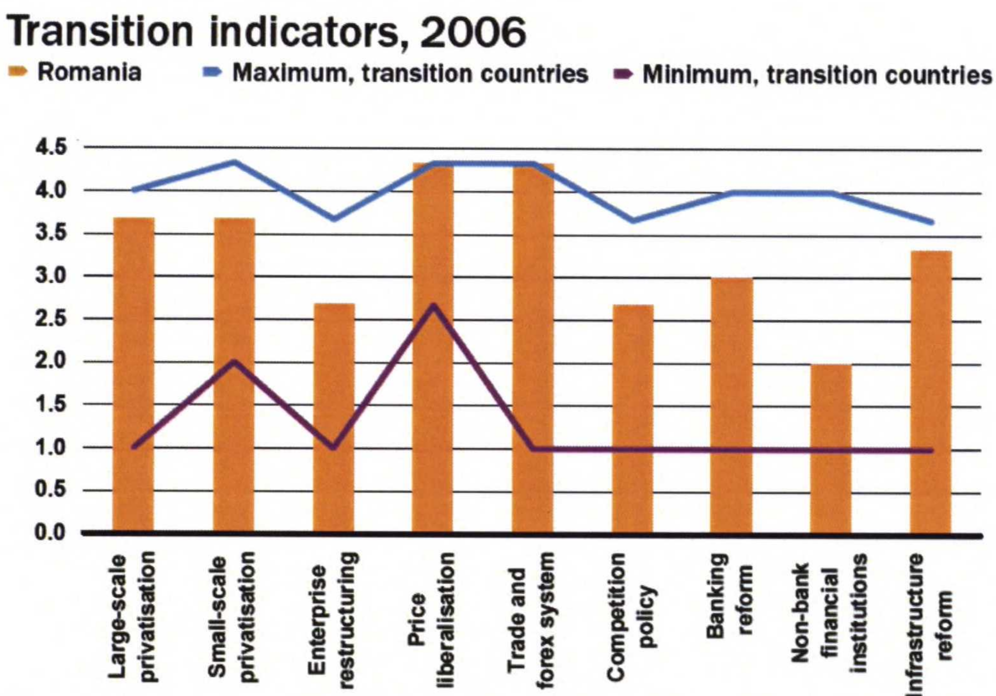

Figure 31. Transition Indicators of Romania (2006). The graph demonstrates the fact that Romania has been an average performer within the reference group. Source: EBRD country fact sheet, Kazakhstan.

6.7.7 Uzbekistan

In 2006, the Uzbek economy grew by an estimated 7,3%. Uzbekistan's two main export products are cotton and gold: Steadily rising commodity prices provide for a continuing growth in the country. In order to sustain the current growth levels, further structural reforms are needed (EBRD Country Fact Sheet 2007, Uzbekistan).

As mentioned, Uzbekistan's economy is highly dependent on the commodity market prices. This fact also makes it vulnerable to external shocks, especially those arising from the neighboring countries of Russia and Kazakhstan. According to EBRD, one solution to this problem could be to diversify the agricultural sector to cover more products.

Uzbekistan's primary export articles are cotton, gold and metal products. Russia, Switzerland, and Great Britain along with Ukraine and Kazakhstan have been the main target countries for exports; on the import side also the USA and Germany have played a major role. (Spiridovitsh, Finpro Market Profile Uzbekistan, 2007).

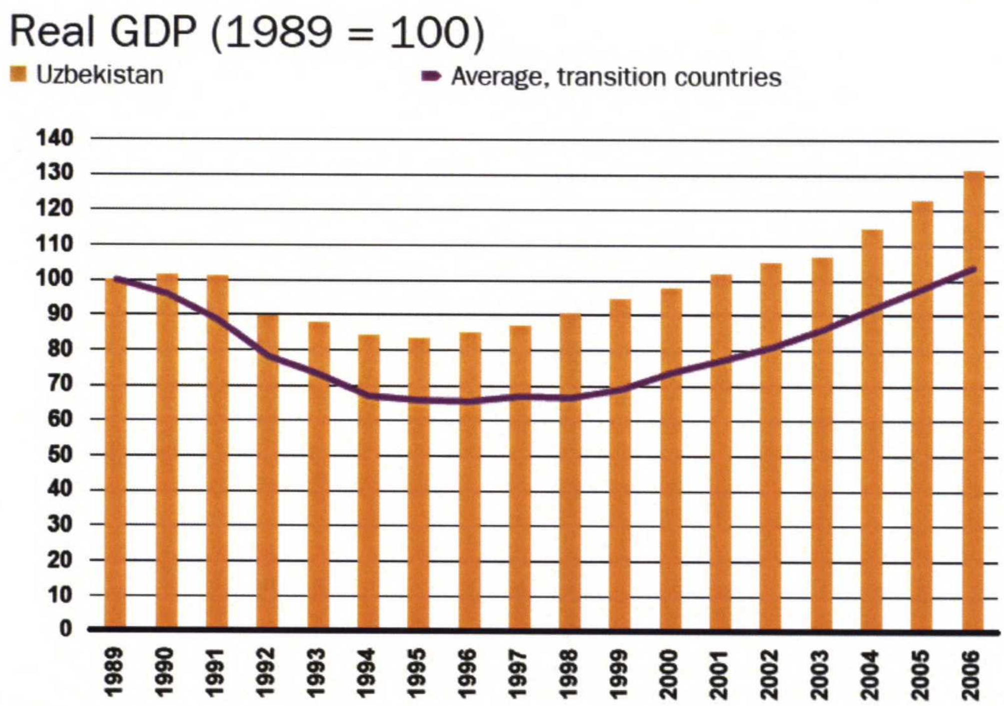

Figure 32. Real GDP -development in Uzbekistan (2006). The development during the past years has been well above the reference group's average. Source: EBRD country fact sheet, Uzbekistan.

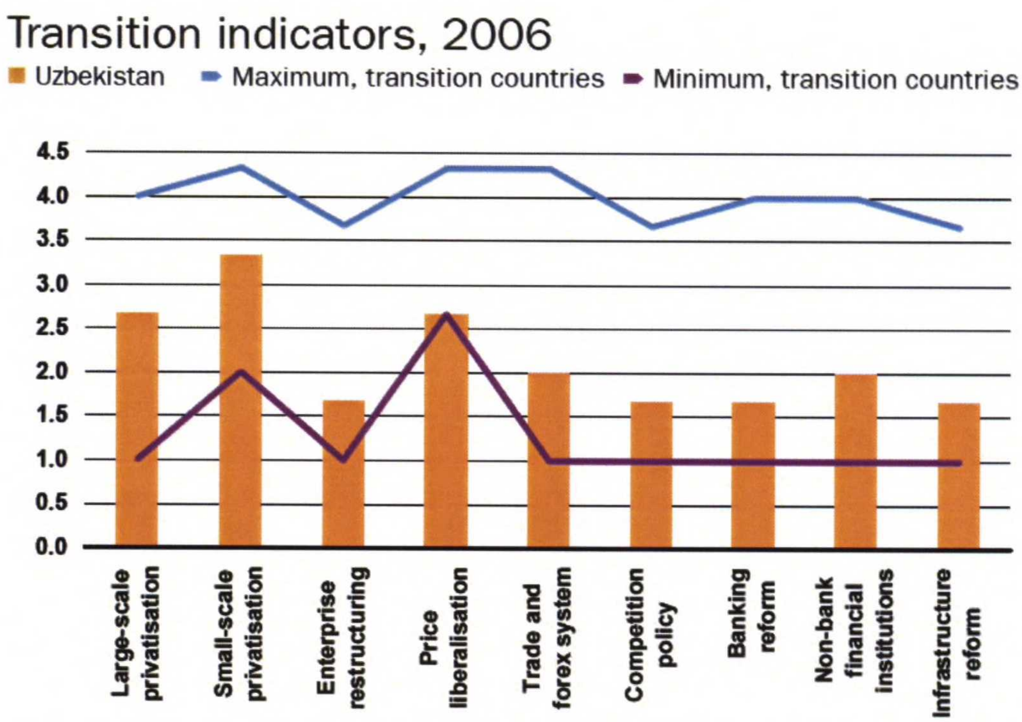

Figure 33. Transition Indicators of Uzbekistan (2006). The graph demonstrates the fact that Uzbekistan has been performing quite poorly within the reference group. Source: EBRD country fact sheet, Uzbekistan.

7. The Empirical Part Of The Study: Results

In order to gather empirical data on the subject studied, a *questionnaire* was developed (please see Appendix 4). This questionnaire was sent, per e-mail and regular mail, to an estimated number of 250 asset managers across the Nordic countries. The vast majority of the respondents were Finnish. In addition to quantitative, also qualitative data was gathered. Qualitative data was obtained from *interviews* conducted with industry professionals.

The researcher was given an outright access to the contact details of Handelsbanken's Finnish institutional clients; this was a pre-requisite with regard to conducting a successful research on the subject studied. The majority of the respondents are clients of Handelsbanken's Nordic Custody Services –department in Finland. A fraction of the responses were received from Handelsbanken's clients in Denmark and Norway. In addition, to grow the sample size even further, responses from a few Finnish non-client institutions were included in the study.

Out of the 250 queries sent to the Nordic asset managers, 33 returned with the adequate data filled in. This number, 33, will also serve as the sample size used in the statistical experiments conducted. Had the sample been even larger, would the *significance levels* applied to the studies have been higher accordingly. However, the prevalent circumstances taken into account, the researcher is very satisfied with regard to the number of responses finally received.

7.1 Interpretation Of The Results

The empirical experiment of the study allows the researcher to carry out *descriptive-* as well as *statistical analysis* on the data. Interpretation of these two forms of data will provide the reader with an in-depth understanding of the studied population's attitudes and motivations regarding investing in the Eastern markets.

With regard to the amount of assets under management, the respondents are divided into two distinct groups of 16 respondents each. Hereafter, these groups are from now on coined with terms *large respondents* and *small respondents*. The term *whole sample* , or merely *sample*, refers to the whole sample population.

The quantitative data is gathered with regard to five different areas of interest. These areas are: *The market places of primary interest; Drivers to Eastern markets; Assets invested into the Eastern markets; Sources of distrust* and *Alternative market places*.

In each of the sections, the results obtained are presented in a uniform way. Along with the average values received by the whole sample (max 7, min 0), a rank order of these values is always given. In addition, the average values from each of the sub groups are presented. The t-stat -measures (Student's t-test) attached describe the *difference between the answers of respondents from different sub groups.* In case of statistically significant deviation from the null hypothesis of no difference, the significance level is provided in the column marked with a greek letter alpha.

7.2 The Market Places of Primary Interest

In the first part of the study, the respondents are asked to indicate their interest regarding trading in each of the Eastern markets. As the graph below unequivocally presents, there are five markets that received the most attention: These markets are *Poland, the Baltic countries* and *the Czech Republic.* Out of the Baltic countries, Latvia and Lithuania are considered slightly more attractive than Estonia.

Table 6. The Market Places of Primary Interest. The Scale is from 7 (max) to 0 (min). Poland, The Baltic Countries along with the Czech Republic were ranked first.

Market	Whole Sample	RANK	Large Resp.	Small Resp.	t-Stat.	ά
Belarus	2,41	10	3	1,94	1,46	
Bulgaria	2,64	9	3,1875	2,19	1,57	
Czech Republic	3,52	2	3,75	3,44	0,43	
Croatia	3,21	6	3,3125	3,25	0,09	
Estonia	3,52	2	3,5625	3,63	0,08	
Kazakhstan	2,88	8	3,4375	2,44	1,34	
Latvia	3,48	4	3,4375	3,69	0,34	
Lithuania	3,48	4	3,5625	3,56	0,00	
Poland	4,36	1	4,625	4,31	0,41	
Romania	3,21	6	3,5	3,06	0,62	
Uzbekistan	2,09	11	2,5	1,75	1,17	

Ex ante, the researcher was inclined to believe that the preferences between sub groups would not be identical. It was expected, for example, that the trading and settlement costs (which are extremely high especially in Kazakhstan and Uzbekistan), would play a role. If this was the case, the small *respondents* would be less inclined to trade in these markets than the *large respondents*.

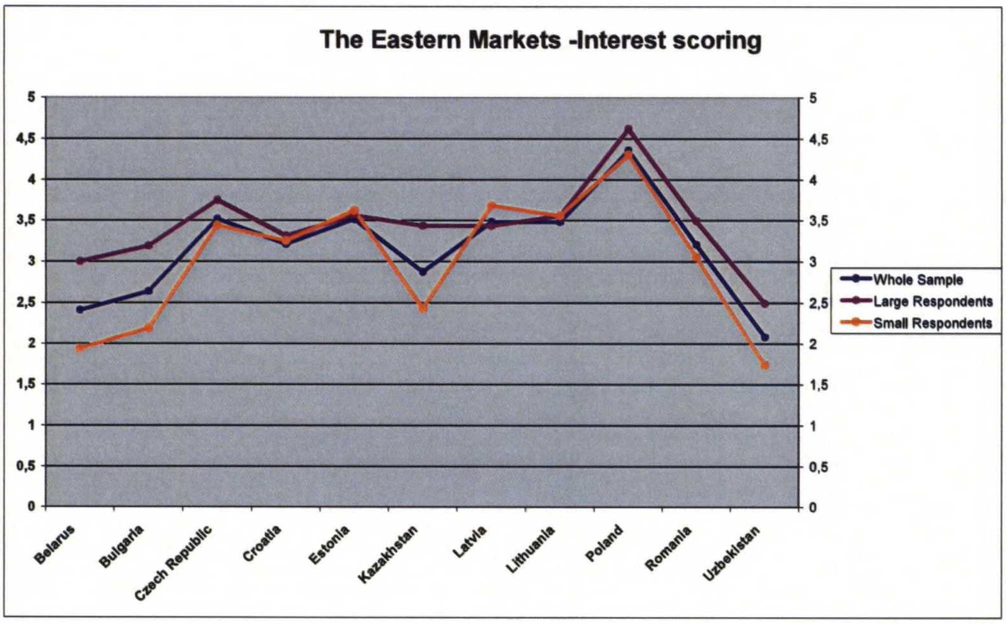

Figure 34. The interest received by each market place: Clearly, Poland, the Baltic countries and the Czech Republic received the most attention with regard to the whole sample. This is presumably due to the fact that they are physically close to the Nordic; however, they also have capital markets with above-average level of development.

However, between the two sub groups studied, no statistically proven difference between preferences is found. Even the market rank orders can, with a small level of deviation considered, be seen as identical relative to each other. Therefore the researchers ex ante expectation was wrong: The large institutional investors are equally reluctant to invest in the more exotic (and expensive) market places as are the small ones.

7.3 The Drivers to Eastern Markets

The survey participants were also asked to grade the specific drivers to the Eastern markets. The drivers graded were: *Geographical diversification*; *high expected return on investment (ROI)*; *will to be among the first to exploit the vast market potential* and sheer *curiosity*. In addition, the below table will provide the reader with results on which instruments are most likely to be traded in these markets.

Variable	Whole Sample	RANK	Large Resp.	Small Resp.	T-Stat.	ά
Geogr. Div.	4,73	2	5,00	4,38	1,03	
High Exp. ROI	5,70	1	5,94	5,50	0,80	
Among the first	4,18	3	4,63	3,56	1,65	
Curiosity	3,48	4	4,13	2,94	1,95	**0,10**
Government Bonds	2,61	2	2,69	2,375	0,43	
Corporate Bonds	2,58	3	2,69	2,3125	0,55	
Derivatives	2,16	4	2,40	1,875	0,84	
Stocks	6,06	1	6,44	5,75	1,41	

Table 7. Drivers To the Eastern Markets along with Instruments to be Traded. The results imply that the respondents are driven to Eastern markets by high ROI-expectations. High returns are sought primarily from equity –investments. N.B.: Curiosity seems to affect large respondents' decisions dramatically, whereas the effect is significantly smaller within the other sub group.

High expected ROI, together with geographical diversification, can be seen as the primary drivers to the Eastern markets. To be among the first to crowd the market and sheer curiosity were important factors, too.

What comes to the traded instruments, *stocks* received the most interested with a remarkable lead to *government-* and *corporate bonds* which followed next. Interest towards *derivatives* was low; this is quite reasonable concerning the undeveloped trading facilities for these instruments in many of the target countries.

In general, the preferences regarding drivers to these markets and traded instruments turned out to be very similar. An exception to this was the fact that among the large respondents, pure curiosity played a more significant role (with statistical certainty). Summa summarum, most of the asset managers are looking for high expected ROI via equity investment in the stock market. Alongside, the portfolio is geographically diversified. According to Driessen & Laven (2005), "there are significant costs *to not* diversifying internationally, especially for investors based in the developing countries". Therefore the diversification aspect is very well founded.

7.4 Amounts of Assets Invested in the Eastern Markets

In 1999, Köke postulated that "The general assessment suggests that no CEE country is an excellent investment target from the perspective of foreign portfolio investors". As the former communist countries of Central and Eastern Europe (CEE) transform to functioning market economies, a lot of new investment opportunities are created. Even though the capital markets in these countries started developing only a while ago, they are making rapid progress. However, according to Köke, deficits primarily in the institutional and economic setting still restrict the flow of foreign investment into CEE countries.

In this section it is studied how the amount of assets allocated to Eastern markets is estimated to change as a function of time. Two different things are asked: 1) How do the asset mangers see it from their own part, and 2) How do they see the general development in Finland. The asset managers are demanded to estimate *the percentage of their assets invested into the Eastern markets* for different time periods: Within one, two, five and ten years from now. In addition, they were requested to estimate *the percentage of Finnish asset managers investing in these markets* (given the same periods of time). The results are shown in the tables below.

Table 8. The development of assets invested into the Eastern markets & The amount of Finnish asset managers investing into the Eastern markets. The above section shows that the trend among respondents is clearly upwards: The below section verifies the assumption of increasing activity among all Finnish asset managers on the market.

Own Portfolio

Time (yrs) from now	Whole Sample	RANK	Large Resp.	Small Resp.	T-Stat.	ά
1	8,72 %		12,31 %	7 %	0,90	
2	10,14 %		13,44 %	8 %	0,81	
5	11,52 %		15,31 %	9 %	0,97	
10	12,31 %		15,44 %	11 %	0,38	

Finnish Investors

Time (yrs) from now	Whole Sample	RANK	Large Resp.	Small Resp.	T-Stat.	ά
1	29,4 %		40,2 %	19,8 %	2,62	**0,01**
2	35,5 %		47,3 %	25,0 %	2,53	**0,02**
5	44,0 %		55,5 %	33,5 %	2,09	**0,04**
10	51,7 %		58,4 %	45,3 %	1,01	

As the above table suggests, the respondents believe that the Eastern markets, on average, is an extremely lucrative investment target. It certainly seems to be worth while investing in. Overall, the portion of assets invested in these markets is estimated to grow as a function of time. Especially the large investors will increase the share of assets invested in these markets: Within ten years from now, they estimate to have allocated a whole 15,44% of their assets to this geographical area. The respective amount among small investors is clearly smaller, reaching only to 11%.

Moreover, the large respondents are slightly more bullish in their estimates regarding Finnish asset managers trading in the Eastern markets. They systematically give larger estimates as their counterparts. There are statistically significant differences in the respondents' views: The large institutional investors seem to be more optimistic in their views regarding in this respect.

7.5 Eastern Markets: Sources of Distrust

While (asset managers are) making investment decisions regarding CEE countries, a host of different criteria is evaluated. The primary variables are *stability of the financial and legal system, liquidity of the stock market* and *managerial competency* (Köke, 1999). In this study, the researcher receives confirmation for the two first-mentioned: The Nordic asset managers find *instability of the political environment, lack of consistent regulatory environment* and *market inefficiency as the principal sources of concern.*

In addition, *counterparty risk* and *asset servicing guidelines* are seen as major factors preventing investment. The below table illustrates the current views on sources of concern pertaining to investing the Eastern markets.

Table 9. Sources of concern regarding investing in the Eastern markets. The abbreviated names of the variables stand for *absence in asset servicing guidelines, instability in the political environment, lack of consistent regulatory environment, lack of DVP (Delivery-Versus-Payment –environment, lack of local market practices, legal risks relating to property rights* and *obstacles relating to currency regulation.*

Variable	Whole Sample	RANK	Large Resp.	Small Resp.	T-Stat.	ά
Asset Serv. Guidelines	4,23	6	4,47	4,13	0,54	
Counterparty Risk	4,81	4	4,80	4,93	0,19	
Inefficient Markets	4,84	3	5,00	4,94	0,10	
Political Environment	5,32	1	5,07	5,67	1,18	
Lack of Cons. Reg. Env.	5,13	2	4,73	5,60	2,04	**0,05**
Lack of DVP-Env.	3,68	8	3,92	3,50	0,74	
Lack of Mkt. Pract.	3,71	7	3,73	3,80	0,13	
Legal Risks	4,25	5	4,20	4,31	0,19	
Currency Regulation	3,52	10	3,67	3,47	0,36	
Systemic Risk	3,48	11	3,47	3,47	0,00	
Technology Risk	3,07	13	3,29	2,93	0,55	
Trading Cost	3,36	12	3,54	3,17	0,63	
Settlement Cost	3,60	9	3,85	3,33	0,90	

According to the respondents, *instability in the political environment* is seen as the primary source of concern. This factor ranks first also in both of the sub samples. *Lack of consistent regulatory environment*, along with *inefficient markets* (i.e. price discovery process) contribute significantly, too. However, the former is seen as a much larger a threat among the small respondents.

Worth notion is the fact that trading and settlement costs don't seem to play a large role; this is truly surprising. *Ex ante*, this was supposed to be one of the major hindrances preventing investment in these markets. However, as the results show, the asset managers don't find it relevant in this sense. As the results of the two sub-samples are analyzed, no major differences are found.

Whilst the three principal sources of concern are unchanged and same for both sub-samples, some deviation is found after this. Whereas the large sample perceives *absence of asset servicing guidelines* extremely important, small respondents see *legal risks relating to property rights* more relevant.

Overall these findings are very interesting and affirmative to Köke's study in 1999. However, one might have presumed that, especially for the small sub sample, the costs had played a major role: If the traded amounts are of small quantity, the price per unit may end up being quite substantial. As it turns out, the cost burden doesn't seem to be of large importance to either of the sub samples.

7.6 Alternative Markets Considered

The researcher also found it worthwhile to explore the competing market places for Eastern markets. The sample group was asked to grade each of the market places by its attractiveness in relation to that of Eastern markets'. To be precise, the respondents were asked *to indicate the markets that most compete with assets possibly allocated to the Eastern markets*. The table below will show the results that were not totally similar across sub-samples.

Table 10. Alternative Market Places to the Eastern Markets.

Variable	Whole Sample	RANK	Large Resp.	Small Resp.	T-Stat.	ά
Brazil	4,41	3	4,00	4,73	1,20	
China	5,28	1	5,25	5,27	0,03	
India	5,00	2	4,63	5,33	1,12	
North-America	2,38	6	1,94	2,87	1,83	**0,10**
South-America	4,06	4	3,56	4,47	1,47	
Western Europe	3,67	5	3,31	4,00	0,93	

As demonstrated in the table above, three markets rose above others: *China, India* and *Brazil*. The combined results of the two sub-samples rated China as number one, leaving India second with a clear margin. The same applies to large respondents, whereas the small sub-sample rated Brazil number two before India that was left third. The respondents' general consent is that *The Americas* and *Western Europe* were the least interesting markets (the large respondents being extreme in their opinions).

8. Summary And Conclusions

This Thesis had two primary targets. *Firstly*, the study aimed to provide the reader with an understanding of the securities custody industry: Furthermore, the special traits of custody service provision on Eastern markets were covered. In-depth information regarding Nordic asset Managers' perceptions of these markets was provided. Thus, *secondly*, having read the empirical section, the reader should have been able to identify the primary motives and main barriers regarding case group's entry to the target market.

This Thesis has been commissioned by Handelsbanken Nordic Custody Services - department. The vast majority of the studied sample are also clients of this organization. Therefore, the author's humble wish is, that the results of this study are of relevance to the commissioning party.

In the empirical part of the study, the researcher divided the institutional investors into two sub groups depending on the institutions' size. The results from the aggregate data, as well as from the sub groups, were compared. With some minor exceptions, the general results suggested that *no remarkable differences between sub groups' preferences are found.*

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In 2006, Syllignakis & Kouretas posited that *the contribution of CEE markets to internationally diversified asset portfolios has increased.* The results from the empirical study seem to support this theory. A similar development can be found among the Nordic asset managers: The assets invested into the target market (the Eastern markets) are estimated to grow as a function of time. Similarly, the per cent value of Finnish asset managers trading in these markets is judged to grow in a corresponding way. Especially the large investors will increase the share of assets invested in the Eastern markets: Within ten years from now, their estimate is more than 40% larger than that of the small respondents (15,44% and 11% respectively).

According to Köke (1999), managers investing into CEE markets check a whole catalogue of criteria. The primary variables, according to Köke, are *stability of the financial and legal system, liquidity of the stock market* and *managerial competency*.

In this study the researcher received confirmation for the two first-mentioned: The Nordic asset managers *found instability of the political environment, lack of consistent regulatory environment* along with *market inefficiency* as the principal sources of concern. In addition, *counterparty risk* and *asset servicing guidelines* were seen as the major factors preventing investment.

The markets that grasped the most interest among the target group were *Poland, the Baltic countries* and the *Czech Republic*. The asset managers' primary incentive to trade in these markets was *high expected return on investment. Diversification benefits* were also considered: This is in line with the theory presented by Driessen & Laven (2005). The target group is primarily interested in trading of *stocks*. *Corporate*- and *government* *bonds* received notably less attention, and out of the instruments measured, *derivatives* elicited the least interest.

When inquired after the principal competing market places to the Eastern markets, three options rose above others: *China, India* and *Brazil*. The respondents' general consent was that *The Americas* and *Western Europe* least competed for funds invested in the Eastern markets.

This study leaves many questions unanswered. For example, a research with an even larger sample size, including new quantitative as well as qualitative measures, would make an interesting research topic. Especially *experiences* from these markets instead of future intentions, could be measured: Rigorous analysis of the past behavior and experiences should be performed. From a commissioner's point of view, this kind of a study would provide for a tangible means of attaining additional *competitive advantage*.

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INTERVIEWS

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Appendices

Appendix 1: Glossary of Terms

Affirmation: The process in which the intended terms of a trade are verified between each direct participant and the indirect participant for whom the direct participant is acting.

BIS: Bank of International Settlements

Book-entry system: An accounting system permitting the electronic transfer of securities without the movement of certificates

Cash deposit risk: The credit risk associated with the holding of funds with an intermediary for the purpose of settling securities transactions

Central securities depository: An institution for holding securities which enables securities transactions to be processed by means of book entries. Physical securities may be immobilized by the depository or securities may be dematerialized so that they exist only as electronic records.

Clearance: The term *clearance* has two meanings in the securities markets. It may mean the process of calculating the mutual obligations of market participants, usually on a net basis, for the exchange of securities and money. It may also signify the process of transferring securities on the settlement date, and in this sense the term *clearing system* is sometimes used to refer to securities settlement systems.

Clearing system: A mechanism for the calculation of mutual positions within a group of participants to facilitate the settlement of their obligations on a net basis.

Confirmation: The process by which a market participant notifies its customers of the details of a trade and allows the customer to positively affirm or question the trade.

Counterparty: One party to a trade.

CPSS: Committee on Payment and Settlement Systems

Credit risk: The risk that a counterparty will not settle an obligation for full value, either when due or at any time thereafter. Credit risk includes *replacement cost risk, principal risk* and *cash deposit risk.*

Custodian: An entity, often a bank, that safekeeps and administers securities for its customers and that may provide various other services, including clearance and settlement, foreign exchange and securities lending.

Custody services: Processing securities trades, keeping financial assets safe and servicing the associated portfolios.

Default: Failure to complete a funds or securities transfer according to its terms for reasons that are not technical or temporary, usually as a result of bankruptcy.

Delivery: Final transfer of a security or financial instrument.

Domestic settlement: A settlement that takes place in the country in which both counterparties to the trade are located.

DVP: Delivery Versus Payment. Where DVP-method is employed, the delivery of the securities takes place *only* if the payment is done in time, and vice versa.

FIBV: The Federation Internationale des Bourses de Valeurs

FOP: Free Of Payment. Delivery of securities with no corresponding delivery of funds.

Giovannini (barriers): In its 2003 report, the Giovannini Group, as an advisor to the European Commission, published a report identifying 15 barriers to efficient EU cross-border clearing and settlement.

Global custodian: A custodian that provides its customers with custody services in respect of securities traded and settled not only in the country in which the custodian is located but also in numerous other countries throughout the world.

Global custody: Processing cross-border securities trades, keeping financial assets safe and servicing the associated portfolios.

Internalization of settlement: When the buyer and the seller use the same custodian, the trade is settled only in custodian's books (not in CSD's), i.e. *internally*.

IOSCO: The International Organization Of Securities Commissions

ISMA: International Securities Market Association

ISSA: International Securities Services Association

Legal ownership: Recognition in laws as the owner of a security or financial instrument.

Legal risk: The risk of loss because of the unexpected application of a law or regulation or because a contract or other right cannot be enforced.

Liquidity risk: The risk that a counterparty will not settle an obligation to its full value when due, but on some unspecified time thereafter.

Local custodian: A custodian that provides custody services for securities traded and settled in the country in which the custodian is located.

Matching: The process of comparing the trade or settlement details provided by counterparties to ensure that they agree with respect to the terms of transaction. Settlement instructions that have been successfully matched between counterparties are referred to as *matched settlement instructions*. In some securities settlement systems, penalties may apply to participants that unilaterally revoke matched settlement instructions. In other systems, unilateral revocation of matched settlement instructions may not be possible.

MiFID: Markets in Financial Instruments Directive

Nominee accounting: Account set up by a nominee (the 'registered owner') for administering securities or other assets held on behalf of the actual owner (the 'beneficial owner') under a custodial agreement

Rolling settlement: A situation in which settlement of securities transactions takes place each day, the settlement of an individual transaction taking place a given number of days after the deal has been struck. This is in contrast to a situation in which settlement takes place only on certain days – for example, once a week or once a month.

SEPA (Single Euro Payment Area). The SEPA project represents the next major step towards closer European integration. SEPA will allow customers to make non-cash euro payments to any beneficiary located anywhere in the euro area using a single bank account and a single set of payment instruments. All retail payments in euro will thereby become "domestic". There will no longer be any differentiation between national and cross border payments within the euro area.

Settlement: The completion of a transaction, wherein the seller transfers securities or financial instruments to the buyer and buyer transfers money to the seller.

Settlement date: The date on which the parties to a securities transaction agree that settlement is to take place. The intended date is sometimes referred to as the *contractual settlement date*.

Settlement risk: A general term used to designate the risk that settlement in a transfer system will not take place as expected. This risk may comprise both credit and liquidity risk.

Sub-custodian: Where one custodian (e.g. a global custodian) holds its securities through another custodian (e.g. local custodian), the latter is known as a sub-custodian.

Systemic risk: The risk that the inability of one institution to meet its obligations when due will cause other institutions to be unable to meet their obligations when due.

T2S (TARGET2 –Securities): TARGET2 -Securities will be a platform for the cross-border and domestic settlement of securities against central bank money. The platform will service the Central Securities Depositories (CSDs). It will be run by the Eurosystem. The T2S project pursues cost reduction by increasing competition and price transparency.

Trade date: The date on which a trade is executed.

Transfer: An act which transmits or creates an interest in a security, a financial instrument or money.

Appendix 2: G30 Recommendations

1. Trade comparisons should be completed by T+0 for direct market participants / Matched trade details should be linked to the settlement system
2. Indirect market participants to achieve affirmation by T+1
3. Each country should have a central securities depository
4. Widest possible range of depository –eligible securities
5. Immobilization/dematerialization to the utmost extent possible
6. Compatible rules and practices in case of multiple CSDs
7. Each country should introduce either Real Time Gross Settlement System (RTGS) or a trade netting system
8. Strict delivery vs. payment should be used for trades
9. Payments should be done on a *same-day funds* –basis
10. A T+3 rolling settlement system should be adopted
11. Securities lending should be encouraged.
12. Each country should adopt ISIN codes
13. ISO standard SWIFT –messages should be used

Appendix 3: The Giovannini Barriers (According to the European Credit Sector Association, 2007)

Barrier	**Necessary Action**
Barrier 1	National differences in the information technology and interfaces used by clearing and settlement providers should be eliminated via an EU-wide protocol. Protocol should be defined by SWIFT and, once defined, should be immediately adopted by the Euro system in respect of its operations.
Barrier 7	Operating hours and settlement deadlines should be harmonized.
Barrier 4	Intra-day settlement finality in all links between settlement systems within the EU should be guaranteed.
Barrier 6	Settlement periods for all systems within the EU should be harmonized.
Barrier 3	National rules relating to corporate actions, beneficial ownership and custody should be harmonized.
Barrier 8	National differences in securities issuance practice should be eliminated.
Barrier 11	All financial intermediaries established within the EU should be allowed to offer withholding agent services in all of the Member States so as to ensure a level playing field between local and foreign intermediaries.
Barrier 12	Any provisions requiring that taxes on securities transactions be collected via local systems should be removed to ensure a level playing field between domestic and foreign investors
Barriers 13, 14, 15	The EU Collateral Directive will remove much of the legal uncertainty relating to netting.
Barriers 2,9	National restrictions on the location of clearing and settlement and on the location of securities should be removed, as an essential pre-condition for a market-led integration of the EU clearing and settlement environment.
Barrier 5	Practical impediments to remote access to national clearing and settlement systems should be removed in order to ensure a level playing field.
Barrier 10	Restrictions on the activity of primary dealers and market makers should be removed.

Appendix 4: The Questionnaire

Handelsbanken Nordic Custody Services

Trading in Eastern markets: Questionnaire

This questionnaire is created to provide Handelsbanken with data about our clients' interests in trading on the Eastern markets. Filling in the form will be of great help to our future product development; the results will also serve as a basis for a Master's Thesis done in Helsinki School of Economics.

The questionnaire begins here. Please indicate:

Home market	Finland
The amount of assets under management (€ millions)	Less than 2

Please indicate your interest in trading on a market by choosing a number from 7 (seven) to 1 (one). Seven indicates a great interest in the market, whereas one merely stands for a minimal interest. In case of no interest, just leave the boxes untouched.

Belarus	#
Bulgaria	#
Czech Republic	#
Croatia	#
Estonia	#
Kazakhstan	#
Latvia	#
Lithuania	#
Poland	#
Romania	#
Uzbekistan	#

Handelsbanken Nordic Custody Services

Trading in Eastern markets: Questionnaire

Why would you consider trading in these markets? The scale is from seven to one; seven assigns a large weight on a factor.

Geographical diversification	#
High expected returns on investment	#
The will to be among the first to exploit the vast unused potential	#
Curiosity towards new market places	#

Which products in these markets interest you?

Government Bonds	#
Corporate Bonds	#
Derivatives	#
Stocks	#

Handelsbanken Nordic Custody Services

Trading in Eastern markets: Questionnaire

Please give your best estimates into the following questions:

Within **one year** from now, how many percent of your total portfolio value will be invested in Eastern markets? %

Within **two years** from now, how many percent of your total portfolio value will be invested in Eastern markets? %

Within **five years** from now, how many percent of your total portfolio value will be invested in Eastern markets? %

Within **ten years** from now, how many percent of your total portfolio value will be invested in Eastern markets? %

Within **one year** from now, how many percent of Finnish asset management companies will be trading in Eastern markets? %

Within **two years** from, how many percent of Finnish asset management companies will be trading in Eastern markets? %

Within **five years** from now, how many percent of Finnish asset management companies will be trading in Eastern markets? %

Within **ten years** from now, how many percent of Finnish asset management companies will be trading in Eastern markets? %

Handelsbanken Nordic Custody Services

Trading in Eastern markets: Questionnaire

Which are the factors worrying you regarding Eastern markets?

Absence of asset servicing guidelines	#
Counterparty (credit) risk	#
Inefficient markets (i.e. price discovery process)	#
Instability in the political environment	#
Lack of consistent regulatory environment	#
Lack of DVP –environment	#
Lack of local market practices	#
Legal risks relating to property rights	#
Obstacles relating to currency regulation	#
Systemic risk	#
Technology risk (technical problems regarding clearing and settlement)	#
Trading Cost	#
Settlement Cost	#

Handelsbanken Nordic Custody Services

Trading in Eastern markets: Questionnaire

Please indicate the markets that most compete <u>with the assets possibly allocated to Eastern markets</u>. The scale is from seven to one; seven assigns a large weight on a market

Brazil	#
China	#
India	#
North-America	#
South-America	#
Western Europe	#